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DEPARTMENT OF THE INTERIOR
FRANKLIN K. LANE, Secretary

UNITED STATES GEOLOGICAL SURVEY
GEORGE OTIS SMITH, Director

Bulletin 632

# SPIRIT LEVELING IN WEST VIRGINIA

## 1896 TO 1915, INCLUSIVE

R. B. MARSHALL, CHIEF GEOGRAPHER

Work done in cooperation with the
West Virginia State Geological Survey during 1898 to 1915, inclusive
I. C. WHITE, State Geologist

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GEOLOGICAL SURVEY BENCH MARKS.

*A*, Tablet used in cooperating States. The State name is inserted at *G*.
*B* and *D*, Copper temporary bench mark, consisting of a nail and copper washer.
*A*, *C*, and *E*, Tablets for stone or concrete structures.
*F*, Iron post used where there is no rock.

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# SPIRIT LEVELING IN WEST VIRGINIA, 1896 TO 1915, INCLUSIVE.

R. B. MARSHALL, Chief Geographer.

## INTRODUCTION.

*Cooperation.*—The State of West Virginia contributed financially to the work in this State from 1898 to 1915, inclusive.

*Previous publication.*—The results of spirit leveling previously published in Bulletins 399 and 477, containing descriptions and elevations of bench marks established in West Virginia from 1896 to 1910, inclusive, and based on the 1903 adjustment, have been corrected to agree with the 1907 adjustment of precise leveling of the Coast and Geodetic Survey and are here republished, together with all results of spirit leveling by the United States Geological Survey since 1910. The elevations were not changed by the 1912 adjustment and are likely to be changed but slightly by any future adjustment.

*Personnel.*—The field work from 1896 to 1906, inclusive, was done under the direction of H. M. Wilson, geographer, and that from 1907 to 1915, inclusive, was done under Frank Sutton, geographer. The work since January, 1908, was done under the general direction of R. B. Marshall, chief geographer. Credit is given in the heading of each list to the several levelmen. The office work of computation, adjustment, and preparation of lists was done mainly by S. S. Gannett, geographer, under the general direction of E. M. Douglas, geographer.

*Classification.*—The elevations are classified as precise or primary, according to the methods employed in their determination. The former are determined by lines of levels run either in both forward and backward directions or by simultaneous double-rodded lines, a high-grade instrument being used and special precautions being taken in observations and reduction to correct errors and make the line continuously good throughout. The latter or primary levels are determined with the Y level, precautions being taken against only the principal errors and the levels being run mostly in circuits of single lines. The allowable limit of error observed on the precise work



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already done by the Geological Survey in this State is represented in feet by 0.02 $\sqrt{D}$ and that for the primary work by 0.05 $\sqrt{D}$, in which D is the length of circuit in miles.

*Bench marks.*—The standard bench marks are of two forms. The first form is a circular bronze or aluminum tablet (*C* and *E*, Pl. I), 3½ inches in diameter and ¼ inch thick, having a 3-inch stem, which is cemented in a drill hole in solid rock in the wall of some public building, a bridge abutment, or other substantial masonry structure. The second form (*F*, Pl. I), used where masonry or rock is not available, consists of a hollow wrought-iron post 3½ inches in outer diameter and 4 feet in length. The bottom is spread out to a width of 10 inches in order to give a firm bearing on the earth. A bronze or aluminum-bronze cap is riveted upon the top of the post which is set about 3 feet in the ground. A third style of bench mark, with abbreviated lettering (*B* and *D*, Pl. I), is used for unimportant points. This consists of a special copper nail 1½ inches in length driven through a copper washer ⅞ inch in diameter. The tablets as well as the caps on the iron posts are appropriately lettered, and cooperation by States is indicated by the addition of the State name (*G*, Pl. I).

The numbers stamped on the bench marks described in the following pages represent the elevations to the nearest foot as determined by the levelman. These numbers are stamped with $\frac{3}{16}$-inch steel dies on the tablets or post caps, to the left of the word "Feet." The office adjustment of the notes and the reduction to mean sea-level datum may so change some of the figures that the original markings are 1 or 2 feet in error. It is assumed that engineers and others who have occasion to use the bench-mark elevations will apply to the Director of the United States Geological Survey, at Washington, D. C., for the adjusted values, and will use the markings as identification numbers only.

*Datum.*—All elevations determined by the United States Geological Survey and United States Coast and Geodetic Survey are referred to mean sea level, which is the level that the sea would assume if the influence of winds and tides were eliminated. This level is not the elevation determined from the mean of the highest and the lowest tides, nor is it the half sum of the mean of all the high tides and the mean of all the low tides, which is called the half-tide level. *Mean sea level is the average height of the water, all stages of the tide being considered.* It is determined from observations made by means of tidal gages placed at stations where local conditions, such as long, narrow bays, rivers, and like features, will not affect the height of the water. To obtain even approximately correct results these observations must extend over at least one lunar month, and if accuracy is desired they must extend over several years. At ocean stations the half-tide level and the mean sea level usually differ but little. It is assumed

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that there is no difference between the mean sea levels determined from observations in the Atlantic Ocean, the Gulf of Mexico, and the Pacific Ocean.

The connection with tidal stations for bench marks in certain areas that lie at some distance from the seacoast is still uncertain, and this fact is indicated by the addition of a letter or word to the right of the word "Datum" on tablets or posts. For such areas corrections for published results will be made from time to time as the precise-level lines of the United States Geological Survey, the United States Coast and Geodetic Survey, or other Government organizations are extended.

*Topographic maps.*—Maps of the following quadrangles wholly or partly in West Virginia have been published by the United States Geological Survey up to July 1, 1916. They may be obtained for 10 cents each or $3 for 50 on application to the Director of the Survey at Washington, D. C.:

Accident (Md.–Pa.–W. Va.).
Antietam (Md.–Va.–W. Va.).
Arnoldsburg.
Athalia (Ohio–W. V.).
Beckley.
Belington.
Belleville (W. Va.–Ohio).
Beverly (W. Va.–Va.).
Blacksville (W. Va.–Pa.).
Bluefield.
Bruceton (W. Va.–Pa.).
Buckhannon.
Burnsville.
Cameron (W. Va.–Ohio–Pa.).
Centerpoint.
Charleston.
Charleston special.
Christiansburg (Va.–W. Va.).
Clarington (Ohio–W. Va.).
Clarksburg.
Clay.
Clendenin.
Crawford.
Dublin (Va.–W. Va.).
Eccles.
Elizabeth.
Elkins.
Fairmont.
Fayetteville.
Flintstone (Md.–W. Va.–Pa.).
Franklin (W. Va.–Pa.).
Frostburg (Md.–W. Va.–Pa.).
Gassaway.
Glenville.
Glenwood (W. Va.–Ohio.)
Guyandot (W. Va.–Ohio.)
Hancock (W. Va.–Md.–Pa.).
Harpers Ferry (Va.–W. Va.–Md.).
Harrisville.
Hinton.
Holbrook.
Holden.
Huntersville.
Huntington (W. Va.–Ohio–Ky.).
Kanawha Falls.
Kenna.
Keno (Ohio–W. Va.).
Kenova (Ky.–W. Va.–Ohio).
Kingwood.
Lewisburg (Va.–W. Va.).
Littleton (W. Va.–Pa.).
Logan.
Louisa (Ky.–W. Va.).
Mannington (W. Va.–Pa.).
Marietta (Ohio–W. Va.).
Meadow Creek.
Midkiff.
Milton.
Monterey (Va.–W. Va.).
Montgomery.
Morgantown (W. Va.–Pa.).
New Martinsville (W. Va.–Ohio).
New Matamoras (Ohio–W. Va.).
Nicholas.
Oakland (Md.–W. Va.).
Oceana (W. Va.–Va.–Ky.).
Otter.
Parkersburg (Ohio–W. Va.).
Parsons.
Pawpaw (Md.–W. Va.–Pa.).

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Peterstown (W. Va.–Md.).
Peytona.
Philippi.
Piedmont (W. Va.–Md.).
Pocahontas (Va.–W. Va.).
Point Pleasant (W. Va.–Ohio).
Pomeroy (Ohio–W. Va.).
Raleigh.
Ravenswood (W. Va.–Ohio).
Ripley.
Romney (W. Va.–Va.–Md.).
Sago.
St. Albans.
St. George.
St. Marys (W. Va.–Ohio.)
Spencer.
Staunton (Va.–W. Va.).
Steubenville (Ohio–W. Va.–Pa.).
Summersville.
Sutton.
Sutton special.
Tazewell (Va.–W. Va.).
Thornton.
Vadis.
Walton.
Warfield (W. Va.–Ky.–Va.).
Wayne.
Wellsville (Ohio–W. Va.–Pa.).
Weston.
West Union.
Wheeling (W. Va.–Ohio–Pa.).
Winchester (Va.–W. Va.).
Winfield.
Winona.
Woodstock (Va.–W. Va.).

## PRECISE LEVELING.

### Blacksville, Fairmont, and Morgantown quadrangles.

#### MARION, MONONGALIA, AND TAYLOR COUNTIES.

The elevations in the following list are a portion of the result of a line of precise levels run in 1899 from Grafton, W. Va., to Pittsburgh, Pa., by E. L. McNair. This line was included in the adjustment of the precise-level net made in 1907 by the Coast and Geodetic Survey, and elevations were not changed by the 1912 adjustment.

The double simultaneous method was employed with a Buff & Berger precise level and two double-faced 10-foot nonextensible target rods.

#### FAIRMONT QUADRANGLE.

[Latitude 39° 15′–39° 30′; longitude 80°–80° 15′.]

**From Grafton north along Baltimore & Ohio R. R. via Fairmont and Morgantown to State line.**

| | Feet. |
|---|---|
| Grafton, Baltimore & Ohio R. R. bridge across Tygart River, at north end of central pier, on coping stone; chisel mark (Coast and Geodetic Survey bench mark "M") | 996.304 |
| Grafton, in front of station; top of rail on main line | 1,000.0 |
| Valley Falls, 2.9 miles east of, bridge seat at northeast corner of girder bridge 104, 7 feet east of center of track, 4 feet below top of outer rail of curve; bronze tablet stamped "986 Pittsburg 1899" | 985.047 |
| Bush, in front of flag station; top of south rail | 984.7 |
| Valley Falls, in front of station; top of north rail | 974.4 |
| Powells, in front of flag station; top of south rail | 907.0 |
| Powells, 0.67 mile west of flag station, stone-arch bridge 108, coping of stone wall, 1.1 feet below top of rail, 7 feet north of center of track; aluminum tablet stamped "899 Pittsburg 1899" | 898.496 |
| Colfax, in front of station; top of south rail | 891.4 |
| Bentons Ferry, at signboard; top of south rail | 889.4 |
| Bentons Ferry, 160 feet south of signboard, bridge seat at southwest corner of girder bridge 111, 4.5 feet below top of rail and 18.5 feet south of center of track; bronze tablet stamped "885 Pittsburg 1899" | 884.545 |

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| | Feet. |
|---|---|
| Fairmont, in front of Baltimore & Ohio station; top of east rail | 883.0 |
| Fairmont, 1.25 miles north of, Baltimore & Ohio R. R. bridge 371 across Monongahela River, at north end of east abutment in coping stone; bronze tablet stamped "885 Pittsburg 1899" | 884.513 |

**BLACKSVILLE QUADRANGLE.**

[Latitude 39° 30′–39° 45′; longitude 80°–80° 15′.]

| | |
|---|---|
| Hoult, in front of station; top of west rail | 881.9 |
| Rivesville, in front of flag station; top of east rail | 880.8 |
| Montana, in front of station; top of east rail | 874.9 |
| Catawba, 0.8 mile south of, Baltimore & Ohio R. R. 1-span truss bridge 369, in coping stone at north end of east abutment, 3 feet below and 8 feet north of rail; bronze tablet stamped "873 Pittsburg 1899" | 872.105 |
| Catawba, in front of station; top of north rail | 872.5 |
| Luther, in front of station; top of east rail | 867.4 |
| Murray (Scottdale post-office), in front of station; top of north rail | 867.5 |
| Opekiska, in front of station; top of north rail | 865.7 |
| Beechwood, in front of station; top of south rail | 859.7 |
| Little Falls, 1.33 miles northwest of, 9.5 feet west of and 4 feet above west rail, 0.5 mile north of bridge 366, in face of rock bluff; bronze tablet stamped "859 Pittsburg 1899" | 858.384 |
| Little Falls, in front of station; top of north rail | 846.8 |

**MORGANTOWN QUADRANGLE.**

[Latitude 39° 30′–39° 45′; longitude 79° 45′–80°.]

| | |
|---|---|
| Uffington, in front of station; top of north rail | 830.9 |
| Uffington, 400 feet north of station, in coping stone of abutment at northwest corner of 1-span truss bridge 364, 3 feet below and 7 feet north of top of rail; aluminum tablet stamped "828 Pittsburg 1899" | 827.452 |
| Russell siding; east rail | 822.2 |
| Morgantown, 480 feet south of Baltimore & Ohio station, in coping stone of abutment at northwest corner of truss bridge over Deckers Creek; bronze tablet stamped "821 Pittsburg 1899" | 820.454 |
| Morgantown, in front of Baltimore & Ohio station; top of east rail | 822.7 |
| Randall, in front of flag station; top of east rail | 824 |
| Van Voorhis, 1 mile south of, in bridge seat at southeast corner of steel-girder bridge 359; bronze tablet stamped "815 Pittsburg 1899" | 814.824 |
| Van Voorhis, in front of station; top of west rail | 817.6 |
| Hoard, in front of flag station; top of east rail | 816.6 |
| State line (West Virginia-Pennsylvania) post; top of east rail | 814.9 |

**Charleston, Hinton, Kanawha Falls, Lewisburg, and Raleigh 30′ quadrangles; Charleston Special, Fayetteville, and Montgomery 15′ quadrangles.**

**FAYETTE, GREENBRIER, KANAWHA, RALEIGH, AND SUMMERS COUNTIES.**

The following are the adjusted results of a line of precise levels extended from precise leveling in Virginia and North Carolina; the closure error, using the Kanawha River survey levels of the army engineers to complete the line from Charleston to the Ohio River, was +0.836 foot upon the 1912 adjustment at Point Pleasant. This error has been adjusted through the entire line from Greensboro,

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N. C., the West Virginia portion being corrected by amounts proportionate to the mileage, between −0.44 foot at Alleghany and −0.732 foot at Lock 6, or at a rate of about 0.002 foot per mile.

The prism level and yard rods were used and the latest methods employed.

The leveling was done in 1907 by C. H. Semper.

### LEWISBURG 30′ QUADRANGLE.

[Latitude 37° 30′–38°; longitude 80°–80° 30′.]

**From Alleghany Tunnel, Va., west along Chesapeake & Ohio Ry. to Hinton; northwest to Gauley, W. Va.; thence northwest along Kanawha & Michigan Ry. to Charleston and Lock 6.**

| | Feet. |
|---|---|
| Tuckahoe, in front of station; top of rail | 2,036.5 |
| Tuckahoe, 2.03 miles west of, 15 feet west of milepost "Cin 355," south of track, in face of wall in rock cut; aluminum tablet stamped "1981" | 1,980.335 |
| White Sulphur, in front of station; top of rail | 1,923.3 |
| White Sulphur, 546 feet north of station, in northwest corner of brick church; aluminum tablet stamped "1915" | 1,914.100 |
| Dickson, in front of station; top of rail | 1,835.4 |
| Dickson, 0.33 mile west of, in top of abutment at west end of bridge over highway; aluminum tablet stamped "1790" | 1,789.207 |
| Harts Run, in front of signboard; top of rail | 1,818.0 |
| Caldwell, in front of signboard; top of rail | 1,764.0 |
| Caldwell, 0.56 mile west of, in top of north side of west abutment of steel bridge; aluminum tablet stamped "1745" | 1,744.562 |
| Whitcomb, 500 feet east of, in top of north side of west abutment of bridge over river; aluminum tablet stamped "1700" | 1,699.570 |
| Whitcomb, in front of station; top of rail | 1,700.7 |
| Ronceverte, in front face of First National Bank building; aluminum tablet stamped "1666" | 1,665.036 |
| Ronceverte, in front of station; top of rail | 1,663.8 |
| Ronceverte, 3.22 miles west of, 240 feet east of milepost "Cin 339," in foundation of semaphore pole; aluminum tablet stamped "1659" | 1,658.111 |

### HINTON 30′ QUADRANGLE.

[Latitude 37° 30′–38°; longitude 80° 30′–81°.]

| | |
|---|---|
| Rockland, in front of station; top of rail | 1,654.7 |
| Fort Spring, in front of station; top of rail | 1,624.4 |
| Fort Spring, directly opposite station, at margin of highway, in railroad retaining wall; aluminum tablet stamped "1622" | 1,621.565 |
| Frazier, in front of signboard; top of rail | 1,610.5 |
| Fort Spring, 2.92 miles west of, 230 feet east of milepost "Cin 333," in face of rock wall; aluminum tablet stamped "1593" | 1,592.730 |
| Half Way, in front of station; top of rail | 1,586.5 |
| Alderson, northwest corner of front face of Merchant Grocery Company building; aluminum tablet stamped "1556" | 1,555.074 |
| Alderson, in front of station; top of rail | 1,550.9 |
| Mohler, in front of station; top of rail | 1,543.7 |
| Alderson, 2.52 miles west of, west of track, 0.38 mile south of milepost "Cin 327," in top of railroad culvert; aluminum tablet stamped "1534" | 1,533.252 |
| Riffe, in front of station; top of rail | 1,523.2 |

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| | Feet. |
|---|---|
| Alderson, 6.13 miles west of, at milepost "Cin 323," in face of rock; aluminum tablet stamped "1525" | 1,524.209 |
| Pence Springs, in front of station; top of rail | 1,530.2 |
| Pence Springs, 0.42 mile west of, in foundation of semaphore pole; aluminum tablet stamped "1531" | 1,530.564 |
| Lowell, in front of station; top of rail | 1,516.8 |
| Talcott, northwest corner of foundation under Chesapeake & Ohio Ry. station; aluminum tablet stamped "1514" | 1,513.329 |
| Hilldale, 175 feet west of, in stone step on north side of track; aluminum tablet stamped "1509" | 1,508.265 |
| Hilldale, 2.53 miles west of, 65 feet west of milepost "Cin 313," in face of rock wall; aluminum tablet stamped "1455" | 1,454.374 |
| Wiggins, in front of station; top of rail | 1,441.5 |
| Wiggins, 2.72 miles west of, in foundation of semaphore pole; aluminum tablet stamped "1395" | 1,394.665 |
| Hinton, in northwest corner of Chesapeake & Ohio Ry. station; aluminum tablet stamped "1388" | 1,385.212 |
| Hinton, in front of station; top of rail | 1,382.2 |
| Hinton, 3.05 miles west of, 260 feet west of milepost "Cin 305," north of track, in bridge seat at east end; aluminum tablet stamped "1350" | 1,349.715 |
| Brooks, in front of signboard; top of rail | 1,341.8 |
| Hinton, 6.04 miles west of, 250 feet west of milepost "Cin 302," south of track, in railroad culvert; aluminum tablet stamped "1329" | 1,328.047 |
| Sandstone, 0.31 mile east of, west side of railroad bridge, in north abutment; aluminum tablet stamped "1292" | 1,291.732 |
| Sandstone, in front of station; top of rail | 1,293.0 |
| Meadow Creek, in front of station; top of rail | 1,272.9 |
| Meadow Creek, 0.2 mile west of, in top of west abutment at north side of railroad bridge; aluminum tablet stamped "1269" | 1,270.126 |
| Meadow Creek, 2.75 miles west of, north of track, in top of east end of railroad culvert; aluminum tablet stamped "1252" | 1,250.998 |

## RALEIGH 30′ QUADRANGLE.

[Latitude 37° 30′–38°; longitude 81°–81° 30′.]

| | |
|---|---|
| Glade, in front of station; top of rail | 1,242.2 |
| Glade, 0.75 mile west of, north of track, 250 feet west of milepost "Cin 290," in top of railroad culvert; alnminum tablet stamped "1233" | 1,232.434 |
| Quinnimont, 40 feet south of station, in top of north abutment at west side of railroad bridge; aluminum tablet stamped "1200" | 1,199.058 |
| Quinnimont, in front of station; top of rail | 1,201.5 |
| Prince, in front of station; top of rail | 1,192.1 |
| McKendree, 0.21 mile east of, 85 feet east of milepost "Cin 282," north of track, in face of bowlder; aluminum tablet stamped "1137" | 1,136.459 |
| McKendree, in front of station; top of rail | 1,130.5 |
| Thayer, in front of signboard; top of rail | 1,111.3 |
| Thayer, 60 feet east of signboard, south of track, in top of west abutment of railroad bridge; aluminum tablet stamped "1111" | 1,110.018 |
| Alaska, in front of signboard; top of rail | 1,095.8 |
| Claremont, in front of station; top of rail | 1,089.8 |
| Stone Cliff, 0.17 mile east of, in foundation of semaphore pole; aluminum tablet stamped "1083" | 1,082.060 |
| Stone Cliff, in front of station; top of rail | 1,079.3 |
| Thurmond, in front of station; top of rail | 1,070.9 |

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| | Feet. |
|---|---|
| Thurmond, in north abutment on west side of railroad bridge over New River; aluminum tablet stamped "1068" | 1,067.457 |
| Rush Run, in front of station; top of rail | 1,045.7 |
| Beury, in front of signboard; top of rail | 1,037.8 |
| Beury, 160 feet east of signboard, in top of west abutment at north side of railroad culvert; aluminum tablet stamped "1036" | 1,035.596 |
| Fire Creek, in front of station; top of rail | 1,034.2 |
| Sewell, 0.58 mile south of, 170 feet south of milepost "Cin 268," in foundation of semaphore pole; aluminum tablet stamped "1011" | 1,010.113 |
| Sewell, in front of station; top of rail | 1,008.2 |

**FAYETTEVILLE 15′ (KANAWHA FALLS 30′) QUADRANGLE.**

[Latitude 38°–38° 15′; longitude 81°–81° 15′.]

| | |
|---|---|
| Caperton, in front of station; top of rail | 991.0 |
| Keeney Creek, in front of signboard; top of rail | 968.8 |
| Nuttall (Nuttallburg post office), 0.56 mile east of, north of track, in top of east abutment to railroad culvert; aluminum tablet stamped "959" | 958.091 |
| Nuttall, in front of station; top of rail | 949.5 |
| Nuttall, 1.47 miles west of, 220 feet west of milepost "Cin 262," west of track, in face of large rock; aluminum tablet stamped "924" | 923.546 |
| Fayette, in front of station; top of rail | 899.9 |
| Newlyn, in front of signboard; top of rail | 880.9 |
| Elmo, in front of signboard; top of rail | 870.6 |
| Fayette, 1.81 miles west of, 200 feet west of milepost "Cin 259," north of track, in face of large rock; aluminum tablet stamped "868" | 867.085 |
| Sunnyside, in front of signboard; top of rail | 849.7 |
| Hawks Nest, in front of station; top of rail | 834.5 |
| Hawks Nest, 0.22 mile west of, south of track, in top of abutment at east end of railroad bridge over New River; aluminum tablet stamped "834" | 832.873 |
| Cotton Hill, in front of station; top of rail | 794.7 |
| Cotton Hill, 1.14 miles west of, 150 feet south of milepost "Cin 253," 7 feet east of track, in top of large rock; aluminum tablet stamped "771" | 770.240 |
| Gauley, in front of station; top of rail | 720.0 |
| Gauley, 400 feet north of Chesapeake & Ohio station, in top of south abutment at west side of bridge over New River; aluminum tablet stamped "712" | 711.842 |
| Gauley Bridge station, on Kanawha & Michigan Ry., at top step of wing wall in south face of abutment at west end of bridge over highway; aluminum tablet stamped "677 Knwa" (old bench mark—elevation given in 21st Annual Report, 677.086) | 676.543 |
| Glen Ferris, in front of station; top of rail | 673.3 |
| Kanawha Falls, 180 feet south of flag station of Kanawha & Michigan Ry., 200 feet north of railway crossing, west of track, nearly opposite house of T. W. Farley, in face of rock at base of cliff; bronze tablet stamped "667 Knwa" (old bench mark—elevation given in 21st Annual Report, 667.121 | 666.540 |
| Falls View, in front of station; top of rail | 652.9 |

**MONTGOMERY 15′ (KANAWHA FALLS 30′) QUADRANGLE.**

[Latitude 38°–38° 15′; longitude 81° 15′–81° 30′.]

| | |
|---|---|
| Boomer, in front of station; top of rail | 644.9 |
| Harewood, in front of station; top of rail (see primary b. m.) | 643.0 |
| Longacre, in front of station; top of rail | 645.1 |
| Smithers, in front of station; top of rail | 640.4 |
| Cannelton, in front of station; top of rail | 638.8 |

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| | Feet. |
|---|---|
| Cannelton, 1.03 miles west of, in east face of masonry near north end of Kanawha Lock 2; bronze tablet stamped "614 Knwa" (old bench mark—elevation given in 21st Annual Report, 614.205) | 613.485 |
| Lock 2, top of coping over tablet (elevation given in 21st Annual Report, 614.530) | 613.808 |
| London, in front of station; top of rail | 636.0 |
| London, 395 feet north of, east of track, in top of railroad culvert; aluminum tablet stamped "636" | 635.334 |
| Hugheston, in front of station; top of rail | 629.1 |
| Riverside, in top of coping stone at northwest corner of head of Lock 3; aluminum tablet stamped "606" | 605.466 |
| Riverside, in front of signboard; top of rail | 626.5 |
| Cedar Grove, in front of station; top of rail | 619.5 |
| Cedar Grove, 1.95 miles west of, in top of bridge seat in east abutment at north side of railroad culvert; aluminum tablet stamped "618" | 617.316 |
| Shrewsbury, in front of station; top of rail | 617.2 |

### PEYTONA (CHARLESTON 30′) QUADRANGLE.

[Latitude 38°–38° 15′; longitude 81° 30′–81° 45′.]

| | |
|---|---|
| Dickinson, in inside face of wall around turntable; aluminum tablet stamped "620" | 619.064 |
| Dickinson, in front of station; top of rail | 622.2 |
| Belle, in front of signboard; top of rail | 613.4 |
| Belle, 110 feet west of signboard, north of track, in top of railroad culvert; aluminum tablet stamped "611" | 609.962 |
| Piatt, in front of signboard; top of rail | 611.8 |

### CHARLESTON SPECIAL (CHARLESTON 30′) QUADRANGLE.

[Latitude 38° 15′–38° 30′; longitude 81° 30′–81° 45′.]

| | |
|---|---|
| Heskett, in front of signboard; top of rail | 616.4 |
| Heskett, 80 feet north of, west of track, in top of north abutment to railroad culvert; aluminum tablet stamped "614" | 612.976 |
| Malden, in front of station; top of rail | 612.3 |
| Dana, in front of station; top of rail on Kanawha & Michigan Ry. track | 608.5 |
| Dana, 1.03 miles west of, south of track, 230 feet east of milepost "G B 33," in top of large rock; aluminum tablet stamped "598" | 597.458 |
| Charleston, in north face of Kanawha & Michigan Ry. station, under window of ticket office; aluminum tablet stamped "601" | 600.935 |
| Charleston, in northwest corner of state capitol; bronze tablet stamped "602 C" (old bench mark) | 600.703 |
| Charleston, in front of station; top of rail | 597.7 |
| Charleston, in front of Park Street station; top of rail | 604.9 |
| West Charleston, in front of station; top of rail | 601.3 |
| Charleston, 4.86 miles west of, at hollow quoin stone of lower gate, in top of coping stone of north wall of Lock 6, chiseled square (army engineers' bench mark—elevation, 565.5) | 569.355 |

## Big Bend, Bluefield, and Peterstown quadrangles.

### MERCER AND SUMMERS COUNTIES.

The following elevations make up the West Virginia portion of the unadjusted results of a line of precise levels run from Hinton, W. Va.,

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south along highways to Glenlyn, Va., thence west along Norfolk & Western Railway to Graham, Va., based upon an elevation at Hinton determined by precise leveling. The leveling was done by two parties, which joined at a point 2 miles west of Oakvale. Yard rods and prism levels were used. The total length of the double line is 57.8 miles and the total divergence was 0.155 foot. For the elevations at Glenlyn and Graham. Va., see the Virginia list B 562.

The leveling was done in 1909, in the Big Bend and Peterstown quadrangles by C. H. Semper, and in the Bluefield quadrangle by T. A. Green.

### BIG BEND QUADRANGLE.

[Latitude 37° 30′–37° 45′; longitude 80° 45′–81°.]

**From Hinton south along highway to point 1 mile south of Crumps Bottom.**

| | Feet. |
|---|---|
| Hinton, in northwest corner of Chesapeake & Ohio Ry. station; aluminum tablet stamped "1386" | 1,385.212 |
| Bellepoint, 1 mile south of, east of road; point on rock marked "U. S. □ B. M. 1440" | 1,440.08 |
| Bellepoint, 3.8 miles south of, 350 feet east of road, at J. N. Hayne's farmhouse, in cement well curb; aluminum tablet stamped "1409" | 1,408.968 |
| Bellepoint, 5.7 miles south of, in southwest corner of J. H. Blankenship's house; aluminum tablet stamped "1402" | 1,402.204 |
| Bellepoint, 6.7 miles south of, west of road, 800 feet south of Webb's house; spike in root of scyamore tree | 1,395.62 |
| Bellepoint, 7.8 miles south of, east of road, 100 feet north of sawmill site; large rock marked "U. S. □ B. M. 1427" | 1,426.72 |
| Bellepoint, 8.8 miles south of, in stone chimney of E. F. Farley's house; aluminum tablet stamped "1446" | 1,446.136 |
| Warford, 150 feet south of store, east of road; large rock marked "U. S. □ B. M. 1411" | 1,410.66 |
| Warford, 1 mile south of, north margin of road; rock 7 by 5 feet marked "U. S. □ B. M. 1453" | 1,453.096 |
| Warford, 2.9 miles south of, in stone chimney of J. H. Dickison's house; aluminum tablet stamped "1446" | 1,446.143 |
| Crumps Bottom, in southwest corner of G. W. Harmon's house; aluminum tablet stamped "1510" | 1,510.063 |
| Crumps Bottom, 1 mile south of, east margin of road, 450 feet below falls; stone marked "U. S. □ B. M. 1451" | 1,451.01 |

### PETERSTOWN QUADRANGLE.

[Latitude 37° 15′–37° 30′; longitude 80° 30′–80° 45′.]

**From point 1 mile south of Crumps Bottom south along highway to Glenlyn, Va., thence west along Norfolk & Western Ry. to point 1.9 miles west of Oakvale.**

| | |
|---|---|
| Crumps Bottom, 2 miles south of, east margin of road, 75 feet north of very large bowlder; rock 5 by 5 feet marked "U. S. □ B. M. 1441" | 1,441.36 |
| Mercer, salt well, 40 feet south of road leading into store yard, in center of highway, in large stone; aluminum tablet stamped "1470" | 1,470.466 |
| Mercer, 2 miles south of salt works, on west margin of road, 300 feet north of log house and barn; rock marked "U. S. □ B. M. 1483" | 1,483.39 |

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| | Feet. |
|---|---|
| Mercer, 3.2 miles south of salt works, 10 feet southeast of Dicks Hollow crossing, 250 feet north of L. R. French's house, on west margin of road, in top of sand rock; aluminum tablet stamped "1510" | 1,510.007 |
| Mercer, 5.3 miles south of salt works, at Bluff post office boat landing, 20 feet west of river, 15 feet east of highway, in large flat rock; aluminum tablet stamped "1466" | 1,465.931 |
| Mercer, 6.3 miles south of salt works, 500 feet south of State line, on west margin of highway by small drain; low stone marked "U. S. □ B. M. 1490" | 1,489.880 |
| Mercer, 8.4 miles south of salt works, 1,400 feet south of schoolhouse, east margin of road; square cut on rock marked "U. S. B. M. 1496" | 1,495.83 |
| Mercer, 8.7 miles south of salt works, in southwest corner of Dr. G. A. Shumate's brick house; aluminum tablet stamped "1571" | 1,571.564 |
| Mercer, 10.3 miles south of salt works, at east end of old railroad grade, where grade crosses highway, on west margin of road; large rock marked "U. S. □ B. M. 1505" | 1,504.65 |
| (For elevations at Glenlyn, Va., see Virginia list B 562.) | |
| Wills, in front of station; top of rail | 1,624.5 |
| Glenlyn, 3 miles west of, 100 feet west of milepost "C 364," in top of north end on east side of bridge abutment; aluminum tablet stamped "1644" | 1,643.830 |
| Oakvale, in front of station; top of rail | 1,712.2 |
| Oakvale, 45 feet west of station, 20 feet north of track, in top of railroad culvert; aluminum tablet stamped "1712" | 1,712.199 |
| Oakvale, 1.9 miles west of, 2.3 miles east of Hardy, opposite milepost "C 358" 2 feet north of east bound track; top of rail set vertically in ground | 1,782.35 |

## BLUEFIELD QUADRANGLE.

[Latitude 37° 15′–37° 30′; longitude 81°–81° 15′.]

**From point 1.9 miles west of Oakvale west along Norfolk & Western Ry. to Bluefield.**

| | |
|---|---|
| Hardy, 0.2 mile east of, 250 feet west of milepost 351, north of railroad, in west edge of sandstone culvert; aluminum tablet stamped "1868" | 1,867.860 |
| Hardy, in front of station; top of rail at crossing | 1,884.22 |
| Ingleside, 0.8 mile east of, at milepost 352, on south end of east abutment of railroad bridge 829; chiseled square | 1,917.98 |
| Ingleside, in front of station; top of rail | 1,950.17 |
| Ingleside, 0.2 mile west of, 300 feet east of milepost 353, on west end of sandstone culvert; chiseled square | 1,959.41 |
| Blake, 200 feet southwest of signal tower, in south end of east abutment of railroad bridge 832; aluminum tablet stamped "2009" | 2,009.607 |
| Ada, 1.6 miles east of, 300 feet west of milepost 357, north of railroad, 20 feet south of gate across trail, in limestone rock; aluminum tablet stamped "2155" | 2,154.887 |
| Ada, in front of station; top of rail | 2,223.7 |
| Bluefields, 3.1 miles east of, 100 feet east of milepost 360, on north side of railroad, in west end of sandstone culvert; aluminum tablet stamped "2331" | 2,330.968 |
| Bluefields, 2.1 miles east of, 50 feet west of milepost 361, on rock; chiseled square | 2,413.20 |
| Bluefields, 100 feet south of station, at front entrance to New Altamont Hotel, in first step above pavement; aluminum tablet stamped "2563" | 2,563.129 |
| Bluefields, in front of station; top of rail | 2,558.43 |

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## PRIMARY LEVELING.

### Flintstone, Frostburg, Hancock, and Pawpaw quadrangles.

#### BERKELEY, MINERAL, AND MORGAN COUNTIES.

Leveling in Frostburg and Flintstone quadrangles in 1897 by Hargraves Wood, and in Pawpaw and Hancock quadrangles in 1898 by C. B. Bailey, and in 1899 by Chas. M. Smith.

#### FLINTSTONE QUADRANGLE.

[Latitude 39° 30′–39° 45′; longitude 78° 30′–78° 45′.]

**From Patterson Creek south to Alaska (part of line).**

| | Feet. |
|---|---|
| Patterson Creek, north end of Baltimore & Ohio R. R. bridge over Patterson Creek, north side of track, in ballast wall; copper plug marked "574 C" | 573.887 |

#### FROSTBURG QUADRANGLE.

[Latitude 39° 30′–39° 45′; longitude 78° 45′–79°.]

**From Patterson Creek south to Alaska (part of line).**

| | |
|---|---|
| Frankfort (Alaska), 0.5 mile northwest of, in west end of north abutment of highway bridge over Patterson Creek; copper bolt stamped "589 C" | 588.817 |

#### HANCOCK QUADRANGLE.

[Latitude 37° 30′–37° 45′; longitude 78°–78° 15′.]

**From Hancock southwest along highway via Berkeley Springs to Rock Gap.**

| | |
|---|---|
| Berkeley Springs, west face of southwest corner stone of Morgan County courthouse; aluminum tablet stamped "612 C" (reported destroyed, courthouse torn down) | 611.795 |

**From Stotlers Crossroads northeast and east along Sleepy Creek to Cherry Run, Md.**

| | |
|---|---|
| Stotlers Crossroads, 0.5 mile north of; at first ford of Sleepy Creek, ledge of rock east side of road, 0.25 mile north of north entrance to ford, in cleft of rock about 4 feet above roadway; aluminum tablet stamped "662 C" | 661.964 |

**From McCoy's Ferry south up Black Creek (double-targeted spur line).**

| | |
|---|---|
| Johnstown, 1.2 miles south of, on an outcrop of sandstone rock about 125 feet east of road forks and 2.5 miles west of Hedgesville; three small pines stand just south; chiseled square | 561.34 |
| Tomahawk, in northeast corner of foundation stone of W. W. Hedges's barn; aluminum tablet stamped "466 C" | 466.543 |

#### PAWPAW QUADRANGLE.

[Latitude 37° 30′–37° 45′; longitude 78° 15′–78° 30′.]

**From Rock Gap, east to Stottler's Crossroads.**

| | |
|---|---|
| Rock Gap, 700 feet west of Fearnow's house, 10 feet north of road at summit of gap, in rock; aluminum tablet stamped "761 C" | 760.666 |

**From Great Cacapon via Long Hollow Run to Fisher Ford (double-targeted spur line).**

| | |
|---|---|
| Great Cacapon, Md., on Lock 55 of Dam No. 6; U. S. C. & G. S. bench mark "C" | 443.811 |
| Fisher Ford, in large bowlder southeast corner of road; aluminum tablet stamped "Maryland 543 C" | 543.188 |

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**Bruceton, Morgantown, Blacksville, and Mannington quadrangles.**

**PRESTON, MONONGALIA, MARION, AND WETZEL COUNTIES.**

Leveling in Morgantown quadrangle in 1899 by W. Crennell, in Blacksville quadrangle in 1901 by M. Page, in Mannington quadrangle in 1902 by J. W. Hodges, and in Bruceton quadrangle in 1902 by F. T. Willis.

**MORGANTOWN QUADRANGLE.**

[Latitude 39° 30′–39° 45′; longitude 79° 45′–80°.]

**From Morgantown southeast via Dellslow to Masontown, returning west and north via Cold Spring to Morgantown.**[1]

| | Feet. |
|---|---|
| Morgantown, 0.4 mile east of, on southeast corner of east abutment of first bridge over Deckers Creek; chisel mark | 820.13 |
| Morgantown, 0.9 mile east of, on northwest corner of east abutment of second bridge over Deckers Creek; chisel mark | 822.88 |
| Morgantown, 3.9 miles east of, at Johnson's mills, on bridge seat at northeast corner of west abutment of third bridge over Deckers Creek; chisel mark | 889.72 |
| Dellslow, north side of creek, 30 feet east of bridge over creek, in top of large bowlder; aluminum tablet stamped "994 Pittsburg 1899" | 993.406 |
| Dellslow, 4.8 miles south of, on south side of east abutment of covered bridge over Deckers Creek; chisel mark | 1,454.37 |
| Masontown, in southeast corner of foundation of Methodist Church; aluminum tablet stamped "1843 Pittsburg" | 1,841.971 |
| Cold Spring, 0.5 mile north of, near watering trough west of pike, in large sandstone; aluminum tablet stamped "2113 Pittsburg" | 2,112.131 |

**From Cheathaven south to Laurel Iron Works.**

| | |
|---|---|
| Laurel Iron Works, 150 feet east of, in southeast bridge seat; aluminum tablet stamped "1055 Pittsburg" | 1,054.464 |

**BRUCETON QUADRANGLE.**

[Latitude 39° 30′–39° 45′; longitude 79° 30′–79° 45′.]

**From Masontown, W. Va., southeast along highway to Albright, thence northeast to Lenox, thence northward via Bruceton Mills to Elliottsville, Pa.**

| | |
|---|---|
| Herring, in southwest corner of stone foundation of church; bronze tablet stamped "2042 Grafton" | 2,041.630 |
| Herring, 4.3 miles southeast of, 8.4 miles east of Masontown, on stone abutment of bridge; square | 1,767.45 |
| Lenox post office, at southwest corner of stone foundation; aluminum tablet stamped "2123 Grafton" | 2,121.868 |
| Lenox, 2.25 miles north of, in southwest corner of stone foundation of Methodist Church; bronze tablet stamped "1851 Grafton" | 1,849.808 |
| Bruceton Mills, 1.6 miles south of, in southeast corner of cut-stone foundation to residence of Marshall A. Wolfe; bronze tablet stamped "1578 Grafton" | 1,577.020 |
| Bruceton Mills, in northeast corner of stone foundation to Lutheran Church; aluminum tablet stamped "1549 Grafton" | 1,548.756 |

[1] The closure on this circuit slightly exceeded allowable limit.



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| | Feet. |
|---|---|
| Brandonville, 1.5 miles east of, in southwest corner of cut-stone foundation to residence of Wm. M. Willett; bronze tablet stamped "1831 Grafton". | 1,831.273 |
| Clifton Mills, on northeast corner of north abutment of iron bridge over Big Sandy Creek; chiseled square | 1,534.80 |

**BLACKSVILLE QUADRANGLE.**

[Latitude 39° 30′–39° 45′; longitude 80°–80° 15′.]

**From Morgantown northwestward to Blacksville.**

| | |
|---|---|
| Cassville, 20 feet north of road and 20 feet west of road running north, in stone doorstep of post office; bronze tablet stamped "999 Grafton" | 998.782 |
| Core, 2.2 miles north-northwest of, 10 feet south of road, in southeast abutment of bridge over east side of Dolls Run; bronze tablet stamped "913 Grafton" | 912.845 |
| Pentress, 1 mile west of, east side of road, north side of Dunkard Creek on abutment of bridge over, at forks of road; chisel mark | 950.69 |
| Blacksville, 10 feet east of center of road, in stone abutment of bridge over Dunkard Creek, 5 feet north of bridge floor; bronze tablet stamped "958 Grafton" | 956.901 |

**From Pentress south along highways to Amos, thence southeast along highway to Catawba.**

| | |
|---|---|
| Amos (Fairview), 30 feet from center of road, in doorstep on east side of door to post office; bronze tablet stamped "1000 Grafton" | 999.450 |
| Rivesville, south side of road, on abutment of iron bridge over Pawpaw Creek, west side of creek; chisel mark | 859.25 |

**From Fairmont northwest along Baltimore & Ohio R. R. to Farmington.**

| | |
|---|---|
| Barrackville, crossing at station; top of rail | 907 |
| Barrackville, 3.7 miles west of, 1.7 miles east of Farmington, on top of northeast abutment of bridge 116; chiseled square | 927.21 |

**MANNINGTON QUADRANGLE.**[1]

[Latitude 39° 30′–39° 45′; longitude 80° 15′–80° 30′.]

**From Farmington northwest along Baltimore & Ohio R. R. to Bellton.**

| | |
|---|---|
| Farmington, George Creek Coal & Iron Co.'s store, at northeast corner in front face of water table; bronze tablet stamped "952 Grafton 1901" | 951.250 |
| Farmington, 2.8 miles northwest of, on abutment of bridge; chiseled square. | 953.045 |
| Mannington, corner of Railroad and Market streets, in pillar north of door of Exchange Bank; bronze tablet stamped "975 Grafton 1902" | 974.946 |
| Metz, at road crossing; top of rail | 1,002 |
| Glover Gap, in south foundation of signal tower; bronze tablet stamped "1040 Grafton 1902" | 1,039.474 |
| Glover Gap, in front of station; top of rail | 1,041 |
| Hundred, crossing at station; top of rail | 1,019 |
| Hundred, 0.1 mile northwest of, in top of bridge seat of northeast abutment of bridge 128; bronze tablet stamped "1013 Grafton 1902" | 1,012.895 |

**From Mannington north up Flat Run along public roads via Galletin to a point north of Crossroads post office (single-spur line).**

| | |
|---|---|
| Galletin, 300 feet east of post office, north of road, in face of rock; bronze tablet stamped "1452 Grafton 1902" | 1,451.918 |
| Crossroads, 1.6 miles north of post office, on north side of road down Miracle Run, 30 feet east of Mrs. Marberly's dwelling, in face of large rock; bronze tablet stamped "1014 Grafton 1902" | 1,014.229 |

[1] A line was run from Blacksville westward via Brave, Pa., and St. Cloud, W. Va., to Hundred, but no standard bench marks were set.

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**Belington, Kingwood, Parsons, and Thornton 15′ (St. George 30′) quadrangles.**

**BARBOUR, PRESTON, RANDOLPH, TAYLOR, AND TUCKER COUNTIES.**

Leveling in Thornton quadrangle in 1904 by F. T. Willis and in 1905 by F. T. Willis and George L. Gordon; in Kingwood quadrangle in 1905 by F. T. Willis and R. A. Kiger; and in Belington and Parsons quadrangles in 1905 by F. T. Willis and J. H. Wetzel.

**THORNTON 15′ QUADRANGLE.**

[Latitude 39° 15′-39° 30′; longitude 79° 45′-80°.]

**From Grafton east along highway via Knottsville, Sinclair, and Fellowsville to Tunnelton.**

| | Feet. |
|---|---|
| Knottsville, 300 feet south of post office, in large rock on east side of road opposite house of W. E. Wilson; bronze tablet stamped "1484 Adj 1903". | 1,483.264 |
| Claude, 1 mile northwest of, 3.1 miles southeast of Knottsville, 10 feet south of center of road, in large rock; bronze tablet stamped "1418 Adj 1903" | 1,417.588 |
| Dent, opposite post office, west side of road, 300 feet south of covered bridge over Sandy Creek, in large rock; bronze tablet stamped "1326 Adj 1903" | 1,325.249 |
| Sinclair, 1 mile northeast of post office, 250 feet north of forks, in large rock on east side of road; bronze tablet stamped "1489 Adj 1903" | 1,488.456 |
| Sinclair, 3.4 miles north of post office, 0.2 mile north of forks of road, 0.1 mile south of residence of H. Goff, west side of road, in large rock; bronze tablet stamped "1408 Adj 1903". (The true elevation is possibly 1 foot greater) | 1,407.685 |
| Fellowsville, 0.3 mile northeast of, in bridge seat of south abutment of iron bridge over Little Sandy Creek; bronze tablet stamped "1379 Adj 1903". | 1,379.139 |
| Fellowsville, 3.2 miles northeast of, 150 feet east of Bolyard residence, on right side of road, in large rock; aluminum tablet stamped "1625 Adj 1903" | 1,625.774 |

**From Grafton east along Baltimore & Ohio R. R. to Irontown, thence north along highways via Gladesville and Browns Mill to Masontown.**[1]

| | |
|---|---|
| Lesmalinston, in front of station; top of rail | 1,031 |
| Thornton, 0.1 mile west of, 5.7 miles east of Grafton, in bridge seat on east side of north abutment of iron bridge over Threefork Creek; aluminum tablet stamped "1041 Adj 1903" | 1,040.842 |
| Irontown, 65 feet northwest of railroad, in large rock; bronze tablet stamped "1079 Adj 1903" | 1,078.502 |
| Irontown, 2.5 miles northwest of, 175 feet east of house, in center of forks of road to left, in large rock; bronze tablet stamped "1506 Adj 1903" | 1,505.294 |
| Irontown, 4.5 miles north of, 100 feet east of house, 150 feet west of road fork to north, north side of road, 15 feet from center, in rock; bronze tablet stamped "1431 Adj 1903" | 1,431.138 |
| Gladesville, 75 feet south of post office, at crossroads, in large rock; aluminum tablet stamped "1774 Adj 1903 | 1,773.401 |
| Gladesville, 3.5 miles east of, at Browns Mills, at crossing of highway with Ices Ferry and Tunnelton pike, on Stony Run, south side of road, in large rock about 4 feet from bridge abutment; aluminum tablet stamped "1635 Adj 1903" | 1,635.201 |

[1] An excessive error is distributed in this line.

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**From Browns Mills southeast along turnpike to Tunnelton.**

| | Feet. |
|---|---|
| Oriole, in northwest corner of stone foundation of Pleasant Valley M. P. Church; bronze tablet stamped "1486 Adj 1903." (This elevation is possibly 1 foot too great) | 1,486.931 |

**From Irontown east along Baltimore & Ohio R. R. to Tunnelton.**

| | |
|---|---|
| Hardman, 0.15 mile west of, 1.7 miles east of Irontown, bridge 97 over Raccoon Creek, near Taylor-Preston County line, in west abutment on north side; bronze tablet stamped "1111 Adj 1903" | 1,110.763 |
| Newburg, 0.2 mile east of, on south side of Baltimore & Ohio R. R., about 75 feet across creek, in large rock; bronze tablet | 1,229.517 |

**From Tunnelton north along highway to Howesville.**

| | |
|---|---|
| Howesville, 700 feet south of post office, on west side of West Virginia Northern R. R., 940 feet west of George Rhodes's store; bronze tablet stamped "2222 Adj 1903" | 2,222.539 |

**KINGWOOD 15′ (ST. GEORGE 30′) QUADRANGLE.**

[Latitude 39° 15′–39° 30′; longitude 79° 30′–79° 45′.]

**At Tunnelton.**

| | |
|---|---|
| Tunnelton, in southeast corner of large cut-stone building owned by J. J. Bonifield; bronze tablet stamped "1828 Adj 1903" | 1,829.182 |

**From Howesville northeast along highway to Albright.**

| | |
|---|---|
| Kingwood, on southwest corner of Price and Main streets, water table of Kingwood National Bank, east of front door; bronze tablet stamped "1862 Adj 1903" | 1,862.485 |
| Albright, at northwest corner of iron bridge over Cheat River, in stone retaining wall; bronze tablet stamped "1217 Adj 1903" | 1,217.057 |

**From Albright southeast along highways to Terra Alta.**

| | |
|---|---|
| Albright, 2.6 miles southeast of, in front of residence owned by John Horner, in large rock on north side of road by water trough; bronze tablet stamped "1891 Adj 1903" | 1,890.749 |
| Terra Alta, in foundation at southeast corner of large brick Offutt & Lakin Building; bronze tablet stamped "2559 Adj 1903" | 2,558.597 |

**From Terra Alta south along highways via Aurora and Horseshoe Run to summit of mountain near Preston-Tucker County line.[1]**

| | |
|---|---|
| Terra Alta, 4.2 miles south of, on farm of John Shaffer, in large rock on west side of road; bronze tablet stamped "2759 Adj 1903" | 2,758.772 |
| Amboy, 1 mile north of, on farm owned by Robert McMickin, in large rock on west side of road; bronze tablet stamped "2700 Adj 1903" | 2,699.094 |
| Aurora, in northeast corner of forks of road, in large rock; bronze tablet stamped "2640 Adj 1903" | 2,639.485 |
| Aurora, 2.4 miles south of, in stone foundation of barn of Daniel J. King; bronze tablet stamped "2650 Adj 1903" | 2,649.979 |
| Horseshoe Run, 1 mile southwest of post office, in north side of stone foundation of church; bronze tablet stamped "2686 Adj 1903" | 2,685.237 |

[1] An excessive error is distributed in this line.

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**From Rowlesburg south along highways to Hannahsville.**

| | Feet. |
|---|---|
| Rowlesburg, Baltimore & Ohio R. R. bench mark 75 | 1,400.765 |
| Rowlesburg, in north side of west abutment of railroad bridge over Cheat River; bronze tablet stamped "1398 Adj 1903" | 1,397.887 |
| Macomber, 3.1 miles south of Rowlesburg, 50 yards east of forks of roads with Northwestern turnpike, on south side of road by farm owned by Mrs. Macomber, in rock; bronze tablet stamped "1410 Adj 1903" | 1,409.652 |
| Etam, 2.1 miles northwest of, on south side of road at forks leading to Dog Run, in large rock; bronze tablet stamped "1618 Adj 1903" | 1,617.911 |
| Etam, southeast corner of stone foundation of schoolhouse; bronze tablet stamped "1765 Adj 1905" | 1,764.077 |

**At Amblersburg.**

| | |
|---|---|
| Amblersburg, west end of south wall of railroad bridge over Saltlick Creek, opposite telegraph pole 250/27; bronze tablet stamped "1625 Adj 1903" (set from corrected railroad precise levels) | 1,624.849 |

**At Rodamers Tunnel.**

| | |
|---|---|
| Rodamers, 0.25 mile northeast of station, south side of west portal of tunnel; bronze tablet stamped "2092 Adj 1903" (set from corrected railroad precise levels) | 2,091.850 |

**PARSONS 15′ (ST. GEORGE 30′) QUADRANGLE.**

[Latitude 39°–39° 15′; longitude 79° 30′–79° 45′.]

**From mouth of Licking Creek along highways up Cheat River to Parsons.**

| | |
|---|---|
| Hannahsville, 3.1 miles south of, west side of road at turn, in outcrop of rock; bronze tablet stamped "1659 Adj 1903" | 1,659.065 |
| St. George, in south end of east abutment of iron bridge over Cheat River; bronze tablet stamped "1553 Adj 1903" | 1,552.614 |
| St. George, 2.6 miles east of, iron bridge over Horseshoe Run, near mouth, in northwest wing wall of concrete abutment; aluminum tablet stamped "1576 Adj 1903" | 1,575.906 |
| Parsons, 2 miles north of, iron highway bridge over Cheat River, in northeast bridge seat; bronze tablet stamped "1614 Adj 1903" | 1,613.690 |
| Parsons, 900 feet east of, iron railroad bridge over Cheat River, in second step of southwest coping stone; bronze tablet stamped (erroneously) "1550 Adj 1903" | 1,649.387 |

**Up Horseshoe Run along highway to top of mountain.**[1]

| | |
|---|---|
| Leadmine, 1 mile south of, in southeast bridge seat of iron highway bridge; aluminum tablet stamped "1727 Adj 1903" | 1,726.642 |
| Leadmine, 2.4 miles northeast of, 970 feet north of intersection of road near mouth of Wolf Run, on west bank of Horseshoe Run, in ledge of rock; aluminum tablet stamped "1872 Adj 1903" | 1,871.911 |
| Leadmine, 7 miles northeast of, on Hogback Mountain, in northwest corner of foundation of residence of David Ruth; aluminum tablet stamped "2482 Adj 1903" | 2,482.056 |

**From Parsons along Western Maryland R. R. to Thomas.**

| | |
|---|---|
| Hambleton, road crossing at station; top of rail | 1,682.3 |
| Hendricks, wagon bridge spanning Black Fork of Cheat River, in northwest bridge seat; aluminum tablet stamped "1721 Adj 1903" | 1,720.604 |

[1] An excessive error is distributed in this line.

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| | Feet. |
|---|---|
| Hendricks, 2.5 miles northeast of, in second step of northeast wing wall of iron railroad bridge; aluminum tablet stamped "1910 Adj 1903" | 1,909.717 |
| Douglas (Albert), 1.1 miles southwest of, at milepost 81, in coping stone south side of east end of stone arch; aluminum tablet stamped "2631 Adj 1903" | 2,630.395 |
| Douglas, in front of station; top of rail | 2,795.7 |
| Thomas, in southwest corner of Davis Coal and Coke Co.'s office; aluminum tablet stamped "2986 Adj 1903" | 2,986.062 |

**From Hendricks southeast along Dry Fork R. R. to Gladwin (unchecked spur line; elevations unreliable).**

| | |
|---|---|
| Hendricks, 3 miles southeast of, 900 feet north of milepost 3, 100 feet east of railroad, 70 feet southeast of spring under oak tree, near two large chestnut trees, in bowlder; aluminum tablet stamped "1788 Adj 1903" | 1,787.221 |
| Hendricks, 6.4 miles southeast of, north of track, in side of cleft of rock; aluminum tablet stamped "1876 Adj 1903" | 1,875.866 |
| Gladwin, at west side of north end of wooden railroad bridge spanning Dry Fork, in large sandstone ledge; aluminum tablet stamped "1944 Adj 1903" | 1,943.365 |

**From Porterwood south to edge of quadrangle (single spur line).**

| | |
|---|---|
| Pleasant Run post office, on right bank of Pleasant Run, 100 feet upstream from wooden bridge, in large flat stone; aluminum tablet stamped "1738 Adj 1903" | 1,737.731 |
| Pleasant Run post office, 3 miles south of, 100 feet south of Harman Hanford's residence, on side of hill, 4 feet south of road, in ledge of rock; aluminum tablet stamped "1898 Adj 1903" | 1,898.187 |

**From Hannahsville southwest along public road.**

| | |
|---|---|
| Hannahsville, west side of stone foundation of house owned by J. R. Loughry; bronze tablet stamped "1526 Adj 1903" | 1,525.126 |
| Hannahsville, 3.3 miles southwest of, on north side of road at Licking Creek, at hollow, in outcrop of rock; bronze tablet stamped "1664 Adj 1903" | 1,663.672 |

**From Parsons southwest along Western Maryland R. R. to Porterwood, thence west along same to point 1 mile west of Moore.**

| | |
|---|---|
| Moore station, 1 mile west of, in northeast bridge seat of iron railroad bridge over Haddix Run; aluminum tablet stamped "1818 Adj 1903" | 1,817.140 |

## BELINGTON 15′ (ST. GEORGE 30′) QUADRANGLE.

[Latitude 39°–39° 15′; longitude 79° 45′–80°.]

**From Moore station along Western Maryland R. R. to Kerens (spur line, checked).**

| | |
|---|---|
| Montrose, 0.2 mile northeast of station, in second step from top of coping stone of northeast wing wall of railroad bridge; bronze tablet stamped "1997 Adj 1903" | 1,996.424 |
| Kerens, in front of station; top of rail | 1,945.8 |
| Kerens, 350 feet south of station, in southwest bridge seat of iron bridge; bronze tablet stamped "1944 Adj 1903" | 1,943.618 |

**From Montrose west along public road.**

| | |
|---|---|
| Montrose, 1.5 miles west of, in foundation stone of east end of Mathias Skidmore's residence; aluminum tablet stamped "2049 Adj 1903" | 2,048.840 |

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**From Hannahsville west along public roads via Valley Furnace to Arden, thence southwest to Philippi.**

| | Feet. |
|---|---|
| Valley Furnace, 5.5 miles northeast of, near head of Licking Creek, south side of road near crossing, in large rock; bronze tablet stamped "2398 Adj 1903" | 2,397.060 |
| Valley Furnace, 0.7 mile west of, on side of road, in large rock; bronze tablet stamped "1462 Adj 1903" | 1,461.146 |
| Nestorville, 1 mile northwest of, on Teter Creek, on farm owned by A. J. Bigman, in large rock on north side of road; bronze tablet stamped "1328 Adj 1903" | 1,327.211 |
| Moatsville (Nicklow post office), southwest abutment of Baltimore & Ohio R. R. bridge over mouth of Teter Creek; bronze tablet stamped "1167 Adj 1903" | 1,166.280 |
| Arden, 75 yards southeast of, near railroad, in large rock; bronze tablet stamped "1275 Adj 1903" | 1,274.297 |

**From Valley Furnace along public roads to Sinclair.**

| | |
|---|---|
| Kasson, post office (Danville), 1.5 miles east of, at forks of road, east side of road, in large rock; aluminum tablet stamped "1634 Adj 1903" | 1,633.623 |
| Colebank, 0.1 mile south of, between church and planing mill, east side of road, in large rock; bronze tablet stamped "1468 Adj 1903" | 1,467.789 |

**From Nestorville south along public roads to Belington.**

| | |
|---|---|
| Nestorville, southwest corner of north abutment of iron bridge over Teter Creek; bronze tablet stamped "1372 Adj 1903" | 1,371.506 |
| Kalamazoo, 0.5 mile north of, on east side of road, in top of outcrop of rock; bronze tablet stamped "1598 Adj 1903" | 1,597.408 |
| Meadowville, southwest corner of cut sandstone foundation of residence of J. D. Holesberry; aluminum tablet stamped "1569 Adj 1903" | 1,568.761 |
| Flora, 0.3 mile south of, on west side of road, opposite Mr. Goodwin's residence, in large rock; bronze tablet stamped "1585 Adj 1903" | 1,584.614 |
| Belington, in base rock of cut-stone foundation of Citizens National Bank; aluminum tablet stamped "1698 Adj 1903" | 1,698.071 |

## Elkins and Horton 15′ (Beverly 30′) quadrangles.

### BARBOUR AND RANDOLPH COUNTIES.

Leveling in Elkins quadrangle in 1905, by J. H. Wetzel, and in Horton and Elkins quadrangles in 1907, by C. K. Alexander.

### ELKINS 15′ (BEVERLY 30′) QUADRANGLE.

[Latitude 38° 45′–39°; longitude 79° 45′–80°.]

**From Gilman station south along Western Maryland R. R. to Elkins, thence west to Roaring Creek Junction, thence north to Belington.**

| | Feet. |
|---|---|
| Gilman, railroad crossing at station; top of rail | 1,926.0 |
| Gilman, 1,800 feet north of station, near sawmill, southeast bridge seat of iron bridge; bronze tablet stamped "Adj 1903 1926" | 1,926.055 |
| Read, in front of station; top of rail | 1,918.0 |
| Elkins, at west entrance of main building of Western Maryland Railroad, in stone step; bronze tablet stamped "1930 Adj 1903" | 1,929.495 |
| Buxton, crossing at station; top of rail | 1,924.2 |
| Elkins, 3.5 miles northwest of, in 2-inch step of southeast wing wall of iron bridge over Tygart River; aluminum tablet stamped "1914 Adj 1903" | 1,913.665 |

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| | Feet. |
|---|---|
| Roaring Creek Junction, road crossing; top of rail | 1,864 |
| Roaring Creek Junction, in northeast bridge seat of Coal and Coke Railroad bridge over Tygart River; aluminum tablet stamped "1865 Adj 1903" | 1,864.247 |
| Harding, in front of station; top of rail | 1,847.4 |
| Junior station, 1 mile south of, small stream at Weaver pumping station, iron-girder bridge, on 2-inch step of northwest abutment; aluminum tablet stamped "1738 Adj 1903" | 1,737.193 |
| Dartmoor, in front of station; top of rail | 1,714.2 |

**From Elkins south along highway to Beverly and return.**

| | |
|---|---|
| Elkins, 3 miles south of, Midland schoolhouse, in west front face of foundation, 1 foot from ground and 1 foot from southwest corner of building; aluminum tablet stamped "2003" | 2,002.592 |
| Beverly, in front face, north end of doorstep of public school; aluminum tablet stamped "1973" | 1,972.593 |

**From Beverly south along highways to Valley Bend, thence west to Rich Mountain, thence north along trail and highways to Roaring Creek Junction.**

| | |
|---|---|
| Beverly, 2.5 miles south of, in top face of north side of east abutment of iron highway bridge over Tygart River; aluminum tablet stamped "1960" | 1,959.567 |
| Valley Bend, Crawford schoolhouse, in rear of building, in face of foundation stone 3 feet west of northeast corner of building; aluminum tablet stamped "2042" | 2,042.097 |
| Pingley's house, 0.5 mile west of, on west side of Rich Mountain, in stone at south side of road; aluminum tablet stamped "3261" | 3,260.939 |
| Fisher or Mabie, 2 miles south of, 150 feet north of road forks, 40 feet west of road, in top face of very large bowlder; aluminum tablet stamped "2568" | 2,568.126 |
| Coalton, in south front face of foundation corner stone in southwest corner of Junior Mercantile Co.'s store; aluminum tablet stamped "2157" | 2,157.023 |

**From Elkins east along highways and Western Maryland R. R. to Tunnel station.**

| | |
|---|---|
| Canfield, 0.1 mile west of station, in top face of stone wall at south end of culvert; aluminum tablet stamped "2088" | 2,087.362 |
| Tunnel station, in front of; top of rail | 2,322.2 |

**From Beverly east along highways to Bemis.**

| | |
|---|---|
| Bemis, 4 miles west of (8 miles east of Beverly), on side of Cheat Mountain, in top face of large bowlder at west side of road; aluminum tablet stamped "3277" | 3,277.156 |

**HORTON 15′ (BEVERLY 30′) QUADRANGLE.**

[Latitude 38° 45′–39°; longitude 79° 30′–79° 45′.]

**From Tunnel Station east and south along Western Maryland R. R. to Bemis.**

| | |
|---|---|
| Meadows, 0.2 mile west of station, 10 feet south of railroad crossing, in ledge of rock; aluminum tablet stamped "2205" | 2,204.609 |
| Bowden, 0.1 mile south of station, in top face of large limestone bowlder, 20 feet west of track; aluminum tablet stamped "2214" | 2,213.234 |
| Bowden, 2.8 miles south of, near log house west of railroad; in top face of stone coping of culvert; aluminum tablet stamped "2311" | 2,310.504 |
| Woodrow, in front of station; top of rail | 2,358.9 |
| Montes, in southwest concrete bridge seat of iron bridge over Cheat River; aluminum tablet stamped "2420" | 2,419.570 |
| Bemis, in top face, east side of north abutment of wooden trestle railroad bridge over Fishing Hawk Creek; aluminum tablet | 2,474.35 |

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## Clarksburg, Fairmont, Philippi, and Weston quadrangles.

### BARBOUR, HARRISON, LEWIS, MARION, TAYLOR, AND UPSHUR COUNTIES.

Leveling in Fairmont and Philippi quadrangles in 1901, by Geo. L. Gordon; in Clarksburg and Weston quadrangles in 1901, by J. H. Hodges.

### FAIRMONT QUADRANGLE.

[Latitude 39° 15′–39° 30′; longitude 80°–80° 15′.]

#### From Fairmont northwest to Farmington, thence south via Boothsville and Meadland to Bridgeport.

| | Feet. |
|---|---|
| Fairmont, 0.32 mile east of, at north end of suspension bridge over Monongahela River, on northwest corner of east revetment wall, on stones; chiseled square | 902.01 |
| Fairmont, 2.4 miles west of, wooden bridge over Ices Run, on northeast corner of top stone in west wall; chiseled square | 985.68 |
| Fairmont, 3.9 miles west of, iron bridge over Buffalo Creek, 2 feet east of southwest corner of north abutment wall; chiseled square | 917.53 |
| Katy, 1.5 miles south of, Georges Creek Coal & Iron Co.'s shaft building, on top of stone at southeast corner of retaining wall; chiseled square | 956.11 |
| Farmington, 5.6 miles south of, iron bridge over West Fork River, in southeast corner of top stone of northwest pier; chiseled square | 891.63 |
| Monongah, Baltimore & Ohio R. R. plate-girder bridge over Booths Creek, west face of north pier, 2 feet from southwest corner, in seventh stone from top; bronze tablet stamped "874 Grafton" | 873.416 |
| Eldora, 1.5 miles south of, on road to west, iron bridge over Booths Creek, 0.7 foot from southwest corner of north abutment wall, on top stone; chiseled square | 952.88 |
| Boothsville, covered bridge over Husted Creek, 3.5 feet from southwest corner and 4.5 feet from top of west face of north abutment; bronze tablet stamped "954 Grafton" | 953.630 |
| Boothsville, 3.1 miles south of, wooden bridge over Husted Creek, on south corner of northeast abutment; chiseled square | 1,017.17 |
| Boothsville, 7.1 miles south of, 50 feet east of crossroads, on northeast corner of west abutment to bridge over Husted Creek; chiseled square | 1,309.66 |
| Meadland, east face of brick house owned by L. J. Stark, 1 foot from northeast corner of foundation; bronze tablet stamped "1319 Grafton" | 1,318.030 |
| Bridgeport, railroad bridge 6 over Simpson Creek, at south end of west abutment, in third stone from top and second above bridge seat, center of east face; bronze tablet stamped "979 Grafton" | 978.273 |

#### From Grafton west along Baltimore & Ohio R. R. to Clarksburg.

| | |
|---|---|
| Grafton, Baltimore & Ohio R. R. bridge over Tygart River, on top of north side of central pier; chiseled square "B□M U. S. C. S. 1878" (Coast and Geodetic Survey bench mark) | 996.304 |
| Webster, Baltimore & Ohio R. R. bridge 2 over Berkeley Run, in northeast face of third stone from top of south abutment wall; bronze tablet stamped "1014 Grafton" | 1,013.230 |
| Webster, southwest of, 5.5 miles from Grafton, trestle 2½, on corner stone; chisel mark (Coast Survey bench mark No. XXXI) | 1,082.088 |
| Rosemont, road crossing near station; top of rail | 1,003 |

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## CLARKSBURG QUADRANGLE.

[Latitude 39° 15′–39° 30′; longitude 80° 15′–80° 30′.]

**From Monongahela Junction north along Baltimore & Ohio R. R. to Monongah.**

| | Feet. |
|---|---|
| Glen Falls, in front of station; top of rail | 932 |
| Meadowbrook, in northwest corner of abutment of iron railway bridge; stamped "B□M" | 922.50 |
| Gypsy, in front of station; top of rail | 915 |
| Shinnston, West Fork River, in southwest corner of retaining wall of highway bridge; bronze tablet stamped "909 Grafton 1901" | 910.000 |
| Worthington, in front of station; top of rail | 896 |
| Worthington, southwest abutment of highway bridge at south end, in top seat; bronze tablet stamped "898 Grafton 1901" | 898.776 |

**From Enterprise west up Bingamon Creek to Margaret, thence south via Wallace and Brown to Lynch.**

| | |
|---|---|
| Enterprise, 5.4 miles west of, on southeast corner of retaining wall of highway covered bridge over Bingamon Creek; chiseled square | 946.92 |
| Margaret, in northwest corner of covered highway bridge over Quaker Fork of Bingamon Creek; bronze tablet stamped "1032 Grafton 1901" | 1,031.780 |
| Irving, at road crossing near Baltimore & Ohio R. R. station; top of rail | 1,016 |
| Brown, 0.2 mile west of, southwest abutment of railroad bridge over Little Tenmile Creek (trestle 404), in top of capstone; bronze tablet stamped "999 Grafton 1901" | 998.743 |

**From Clarksburg west along Baltimore & Ohio R. R. to Lynch.**

| | |
|---|---|
| Clarksburg, at corner of Pike and Third streets, in northwest corner of post office, 2 feet above ground; aluminum tablet stamped "1006 Grafton" | 1,007.209 |
| Adamston, 0.5 mile west of, northeast corner of trestle 9, on top of stone; chiseled square | 960.19 |
| Wilsonburg, in front of station; top of rail | 984 |
| Wilsonburg, 0.5 mile west of, on small culvert south of track; chiseled square | 997.20 |
| Reynoldsville, at road crossing near station; top of rail | 1,101 |
| Wolf Summit, at southeast corner of William H. Dolan's store, in end of stone curbing; bronze tablet stamped "1133 Grafton 1901" | 1,134.052 |
| Lynch, 0.5 mile west of, trestle 14 of Baltimore & Ohio R. R., on top of retaining wall, on sixth stone from bridge; chiseled square | 1,039.11 |

## PHILIPPI QUADRANGLE.

[Latitude 39°–39° 15′; longitude 80°–80° 15′.]

**From Bridgeport via Berryburg, Switzer, and Pleasant Creek to Webster.**

| | |
|---|---|
| Berryburg, Southern Coal & Transportation Co.'s tipple, west of tipple and in front of power house, in fourth stone from top of retaining wall; bronze tablet stamped "1390 Grafton" | 1,389.060 |
| Switzer, 1.1 miles northeast of, east side of pike, on southeast corner of stone gate step of residence of B. H. Woodford; chiseled square | 1,447.25 |
| Pleasant Creek, brick residence of A. I. Cole, west corner of stone foundation, fifth stone from top and fourth from ground, 1.45 feet from corner; bronze tablet stamped "1170 Grafton" | 1,169.644 |

**From Switzer south via Philippi to Pecks Run.**

| | |
|---|---|
| Switzer, 4 miles south of, covered bridge over Tygart River, in northwest corner of top stone of east abutment wall; chiseled square | 1,307.61 |

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| | Feet. |
|---|---|
| Philippi, at north side of front entrance to brick schoolhouse, in center north face of foundation stone; bronze tablet stamped "1311 Grafton" | 1,310.265 |
| Buckhannon (Tygart) Junction, plate-girder bridge 1, over Tygart River, in north side of west abutment, in center of east face of first stone above bridge bed; bronze tablet stamped "1334 Grafton" | 1,333.120 |
| Volga (3.2 miles southwest of Malta), in north abutment of Baltimore & Ohio R. R. bridge over Wash Run, in east face in center of third stone from top; bronze tablet stamped "1404 Grafton" | 1,403.439 |
| Volga, 2.5 miles southwest of, on northwest corner of north abutment of bridge over Pecks Run, in second stone from top; chiseled square | 1,405.04 |
| Pecks Run (Hodgeville), in northwest corner of south abutment of bridge over Pecks Run, on west side of second stone from corner; chiseled square | 1,418.85 |

**From Pecks Run via Peeltree and Overfield to Pepper.**

| | |
|---|---|
| Peeltree, retaining wall in front of residence of Dr. Isaac Smith, at opening for steps, west face of south wall, in center of third stone above third step from sidewalk; bronze tablet stamped "1069 Grafton" | 1,068.389 |
| Peeltree, 2.9 miles north of, in front of Denver Pecken's dwelling, in third step from bottom of stone stile; chiseled square | 1,093.26 |
| Peeltree, 4.4 miles north of, on southeast corner of north abutment of iron bridge over Elk Creek; chiseled square | 1,022.70 |
| Overfield, 3.1 miles northeast of, in front of Cletus Stout's dwelling, east side of stone stile, on north end of bottom step; chiseled square | 1,102.71 |

**From Pecks Run south to Buckhannon, thence northwest to Ruraldale.**

| | |
|---|---|
| Ruraldale, 0.6 mile west of, near fork of road by old mill, 200 feet east of residence of V. H. Regar, in face of large rock; bronze tablet stamped "1121 Grafton 1901" | 1,121.768 |

**WESTON QUADRANGLE.**

[Latitude 39°–39° 15′; longitude 80° 15′–80° 30′.]

**From Ruraldale north via Johnstown to Quiet Dell, thence southwest to West Milford, thence north to Clarksburg.**

| | |
|---|---|
| Johnston, 0.1 mile west of, in face of ledge of rock north of road; bronze tablet stamped "1062 Grafton 1901" | 1,062.546 |
| Quiet Dell, 0.5 mile south of, 600 feet from crossroads, in large bowlder on west side of road; aluminum tablet stamped "1050 Grafton 1901" | 1,050.378 |
| West Milford, at southwest corner of highway bridge over West Fork River, in top of bridge seat; bronze tablet stamped "979 Grafton 1901" | 978.965 |

**From West Milford south along highways to Weston.[1]**

| | |
|---|---|
| Jane Lew, southeast end of railroad bridge over Hackers Creek, in top of first stone below bridge seat; aluminum tablet stamped "1007 Grafton 1901" | 1,006.647 |

**From Weston along road to Ruraldale.**

| | |
|---|---|
| Weston, at end of southwest pier of Baltimore & Ohio R. R. bridge 24 A over West Fork River; bronze tablet stamped "1017 Grafton 1901" [2] | 1,008.903 |

[1] The error distributed in this line is excessive.

[2] This description and corrected elevation were furnished by the chief engineer of the Baltimore & Ohio Railroad after reconstruction of pier.

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**From Weston south along Baltimore & Ohio R. R. to Brownsville.**

| | Feet. |
|---|---|
| Weston, 0.5 mile south of, on northeast corner of south abutment of railroad bridge 25 C; chiseled square | 1,017.37 |
| Brownsville, on northeast corner of west abutment of covered bridge; chiseled square | 1,027.81 |

**Centerpoint, Littleton, and West Union quadrangles.**

**DODDRIDGE, HARRISON, MARSHALL, RITCHIE, TYLER, AND WETZEL COUNTIES.**

## Leveling in 1903 by George L. Gordon.

**LITTLETON QUADRANGLE.**

[Latitude 39° 30′–39° 45′; longitude 80° 30′–80° 45′.]

**From Bellton southwest along highways via West to Halls Mills, thence south to Reader, thence east along highways and railroad to Jacksonburg, thence northeast along highway to Littleton.**

| | Feet. |
|---|---|
| Bannen, 1.1 miles southwest of; schoolhouse subdistrict 9, 8.8 feet southwest of west corner; iron post stamped "1398 Grafton" | 1,397.860 |
| Bannen, 2.8 miles southwest of; schoolhouse at forks of road, stone steps, bottom step, west end; chiseled square | 1,376.68 |
| Silver Hill, bridge over Laurel Run, south end of west abutment; chiseled square | 1,133.66 |
| West, east angle of forks of road, outcrop of rock; bronze tablet stamped "1106 Grafton" | 1,105.918 |
| Bebee post office, bottom step of stone stairway to house of Louis Feias; chiseled square | 1,205.45 |
| Halls Mills (5.3 miles southwest of West), north side of road near Thomas Adams's store and dwelling, outcrop of rock; bronze tablet stamped "774 Grafton" | 774.096 |
| Reader, county bridge over Fishing Creek, northeast corner of south abutment; aluminum tablet stamped "693 Grafton" | 693.376 |
| Reader, 0.8 mile southeast of, Baltimore & Ohio R. R. bridge 145, north end of east abutment, top stone; chiseled square | 687.59 |
| Galmish, 0.2 mile east of pump station, Baltimore & Ohio R. R. bridge 159 over Piney Creek, on south end of west abutment, sixth step from top; chiseled square | 687.67 |
| Pinegrove, covered bridge over North Fork of Fishing Creek, southwest corner of north abutment; chiseled square | 712.28 |
| Pinegrove, 1.8 miles southeast of, Baltimore & Ohio R.R. bridge 195, north abutment east end of bridge seat; chiseled square | 722.77 |
| Jacksonburg, lot at railroad crossing; top of rail | 747.0 |
| Jacksonburg, 0.1 mile southeast of, Baltimore and Ohio R. R. bridge over Buffalo Run, northwest abutment, south corner of bridge seat; bronze tablet stamped "746 Grafton" | 745.658 |
| Lowman, 0.05 mile southeast of, east of road, in outcrop of rock; aluminum tablet stamped "839 Grafton" | 838.920 |
| Uniontown, 0.08 mile southwest of; south of road, in outcrop of rock; aluminum tablet stamped "1133 Grafton" | 1,133.020 |
| Uniontown, 1 mile northeast of, bridge over Knob Fork, east end of northeast abutment; chiseled square | 1,052.44 |
| Uniontown, 4.7 miles northeast of, bridge over small hollow, top of northeast stone of abutment; chiseled square | 1,179.08 |

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**From Jacksonburg (lot) southeast along Baltimore & Ohio R. R. to Smithfield.**

| | Feet. |
|---|---|
| Jacksonburg, 1.3 miles southeast of, railroad bridge 236, over South Fork of Fishing Creek, northwest abutment, northeast end of bridge seat; chiseled square | 765.60 |
| Jacksonburg, 3.5 miles southeast of, railroad bridge 260 over South Fork of Fishing Creek, top of west abutment, north side; chiseled square | 802.80 |
| Jacksonburg, 4.75 miles southeast of, northwest corner of railroad culvert; chiseled square | 811.62 |

**From Galmish southwest along highway to Lima.**

| | |
|---|---|
| Piney, cliff between forks of creek, near the corner; bronze tablet stamped "790 Grafton" | 789.739 |

**CENTERPOINT QUADRANGLE.**

[Latitude 39° 15′–39° 30′; longitude 80° 30′–80° 45′.]

**From Smithfield southeast along Baltimore & Ohio R. R. to Wallace.**

| | |
|---|---|
| Smithfield, 0.2 mile northwest of, railroad bridge 293 over South Fork of Fishing Creek, north abutment southeast corner of bridge seat; bronze tablet stamped "829 Grafton" | 828.437 |
| Smithfield, railroad crossing at station; top of rail | 835.7 |
| Folsom, 1.6 miles northwest of, railroad bridge 307 over South Fork of Fishing Creek, south abutment, second stone from top; chiseled square | 870.27 |
| Folsom, railroad crossing between station and post office; top of rail | 952 |
| Rinehart, 3.6 miles northwest of; 0.2 mile northwest of tunnel station, on southwest corner of railroad culvert; chiseled square | 1,051.26 |
| Rinehart, 0.05 mile southeast of; in northwest corner of railroad culvert over Mudlick Run; aluminum tablet stamped "1059 Grafton" | 1,058.545 |
| Rinehart, railroad crossing; top of rail | 1,068.0 |

**From Lynch west along Baltimore & Ohio R. R. to West Union.**

| | |
|---|---|
| Wolf Summit, 3.8 miles west of, on southwest corner of Baltimore & Ohio R. R. trestle 15; chiseled square | 1,052.68 |
| Bristol, 0.2 mile west of, top stone of northwest corner of small culvert; marked "B. M." | 1,027.13 |
| Salem, easternmost railroad crossing in; top of rail | 1,046.6 |
| Salem, Salem Bank, 4 feet east of corner, in south face of water table; aluminum tablet stamped "1047 Grafton" | 1,046.996 |
| Industrial, railroad crossing at; top of rail | 1,074.3 |
| Long Run, 0.7 mile east of, railroad bridge 16, southwest corner of east abutment; chiseled square | 876.93 |
| Long Run, railroad crossing at; top of main-track rail | 854.1 |
| Long Run, 675 feet west of station, north side of railroad; aluminum tablet stamped "853 Grafton" | 852.896 |
| Sherwood post office, at road crossing; top of rail | 831.6 |
| Morgansville, 0.2 mile west of, Baltimore & Ohio R. R. bridge 17, northwest corner of east abutment; chiseled square | 812.00 |
| Smithton, railroad crossing at; top of rail | 797.1 |
| Smithton, 0.7 mile west of, about 2 miles east of West Union, on abutment of bridge 21; Coast and Geodetic Survey bench mark XXXIII | 799.795 |

**From West Union northeast along highway to Wallace.**

| | |
|---|---|
| Kenton, 1.1 miles north of, east of road on bank of Little Flint Run, opposite junction of run from west, on northwest corner of low flat rock; chiseled square | 763.60 |

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| | Feet. |
|---|---|
| Kenton, 3.4 miles north of; 0.1 mile west of Eagle Mills post office; in bend at side of road, near dwelling, in large flat rock; bronze tablet stamped "760 Grafton" | 759.474 |
| Centerpoint, 0.1 mile south of, northeast side of road at sharp bend to left, in outcrop of rock; bronze tablet stamped "790 Grafton" | 789.376 |
| Centerpoint, 3 miles east of, about 160 feet east of J. T. Shield's store, north of road, on top of rock; chiseled square | 864.52 |
| Centerpoint, 6 miles east of, junction of road at summit (on county line), southwest angle, on large rock; chiseled square | 1,277.15 |

**WEST UNION QUADRANGLE.**

[Latitude 39° 15′–39° 30′; longitude 80° 45′–81°.]

**From Lima west to Blue.**

| | |
|---|---|
| Lima, 0.37 mile west of, north of road, in outcrop of rock; bronze tablet stamped "769 Grafton" | 768.935 |
| Blue, 0.2 mile east of, on east end of second step from bottom of stone steps in front of dwelling; chiseled square | 733.93 |

**From Middlebourne southeast along highway to West Union.**

| | |
|---|---|
| Middlebourne, in stone over cellar window, north of front entrance to house, northeast of sheriff's residence; aluminum tablet stamped "744 Grafton 1903" | 744.912 |
| Middlebourne, 0.2 mile southeast of; on southwest corner of east abutment of iron bridge over Gorrell Run; chiseled square | 681.23 |
| Blue, 0.3 mile southeast of, in southwest corner of northwest abutment to iron bridge over mouth of Indian Creek; bronze tablet stamped "707 Grafton" | 706.893 |
| Blue, 1.6 miles southeast of, south corner of northwest abutment to iron bridge over McElroy Creek; chiseled square | 716.36 |
| Wilbur, 0.15 mile northwest of (6.5 miles southeast of Blue) east of road, in outcrop of rock; bronze tablet stamped "973 Grafton" | 973.692 |
| West Union, Bank Building, between door and center window, in center face of stone; aluminum tablet stamped "836 Grafton" | 835.724 |
| West Union, 0.2 mile east of, in southwest corner of pier of Baltimore & Ohio R. R. bridge 23 over Middle Island Creek; chiseled square, lettered "U. S. C. & G. S. N." | 804.478 |
| West Union, 1 mile east of; 60 feet west of junction of road, on southeast corner of east abutment to bridge over Rock Run; chiseled square | 778.40 |

**From Blue along highway southwest to Bearsville, thence south to Tollgate.**

| | |
|---|---|
| Alma (Centerville), 3 miles south of, southwest angle of forks of road, under corner of store, on top of large flat rock; chiseled square | 716.95 |
| Alma, 6.5 miles southwest of (0.34 mile south of Bearsville) northeast of road, northwest side of hollow; in outcrop of rock; bronze tablet stamped "839 Grafton" | 839.049 |
| Molehill, north bank of Brush Run, at forks of road, in outcrop of rock; bronze tablet stamped "854 Grafton" | 854.225 |
| Molehill, 7.5 miles south of, on northeast bridge seat of iron bridge on old northwestern pike over North Fork of Hughes River; chiseled square | 793.58 |
| Tollgate post office, 0.4 mile west of (about 10 miles west of West Union) on the southeast corner stone of pier of Baltimore & Ohio R. R. bridge 26; United States Coast and Geodetic Survey bench mark | 802.447 |
| Greenwood, 0.4 mile west of, north of Baltimore & Ohio R. R., near center of rock cut; bronze tablet stamped "854 Grafton" | 854.265 |

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**From Tollgate west along Baltimore & Ohio R. R. to Ellenboro.**

| | Feet. |
|---|---|
| Pennsboro, railroad crossing; top of rail | 861 |
| Pennsboro, east face of Farmers' and Merchants' Bank Building, 2.8 feet north of southwest corner, 2 feet above pavement; bronze tablet stamped "852 Grafton" | 852.269 |
| Ellenboro, 4.2 miles east of, about halfway between tunnels 8 and 9, on ledge of rock south of track; chiseled square | 872.39 |

**From Middlebourne southwest along highway to Little post office.**

| | |
|---|---|
| Little post office, on top of east pier south side of large iron bridge over Middle Island Creek; bronze tablet stamped "672 Grafton 1903" | 671.937 |

## Holbrook and Vadis quadrangles.

### DODDRIDGE, GILMER, LEWIS, AND RITCHIE COUNTIES.

Leveling in Holbrook quadrangle in 1903 by G. L. Gordon and F. T. Willis and in Vadis quadrangle in 1902 by G. L. Gordon.

### VADIS QUADRANGLE.

[Latitude 39°–39° 15′; longitude 79° 30′–79° 45′.]

**From West Union southeast along pike to point 2.3 miles southeast of New Milton.**

| | Feet. |
|---|---|
| Sugarcamp, 0.5 mile southeast of, in southwest corner of east abutment of iron bridge over Meathouse Fork; bronze tablet stamped "830 Grafton" (mean of direct and reverse lines) | 829.600 |

**From point 2.2 miles southeast of New Milton southeast along pike via Avon and Churchville to Weston.**

| | |
|---|---|
| Avon, 0.2 mile south of, on west end of north abutment of covered bridge over Middle Island Creek; chiseled square | 867.02 |
| Churchville, 0.5 mile southeast of, left side of main road to Weston, in west side of middle of large rock; aluminum tablet stamped "972 Grafton" | 971.586 |

**From Weston west along road via Alum Bridge and Linn to mouth of Fink Creek, thence north via Hurst to New Milton.**

| | |
|---|---|
| Camden, opposite post office, in front yard to P. E. Fetty's house, 8.5 feet west of porch and 1 foot south of fence; iron post stamped "1096 Grafton" | 1,095.482 |
| Alum bridge, iron bridge over Alum Fork of Leading Creek, in southeast corner of west abutment; bronze tablet stamped "810 Grafton" | 809.872 |
| Linn, 1.75 miles northwest of, in northwest corner of bridge seat of east abutment of iron bridge over Fink Creek; bronze tablet stamped "766 Grafton" | 765.791 |
| Hurst, cliff facing south, 4.5 feet below top; bronze tablet stamped "815 Grafton" | 814.658 |

**From Avon east via county road to Big Isaac.**

| | |
|---|---|
| Avon, 1.8 miles southeast of, in north angle of forks of road at Double Camp Run; iron post stamped "884 Grafton" | 883.687 |

### HOLBROOK QUADRANGLE.

[Latitude 39°–39° 15′; longitude 80° 45′–81°.]

**From West Union south along highway via Oxford, Grove, and Troy to Leading Creek.**

| | |
|---|---|
| West Union, 5.5 miles southwest of, large dwelling east side of road, near outcrop of rock; bronze tablet stamped "881 Grafton" | 881.184 |

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| | Feet. |
|---|---|
| Oxford, 0.25 mile south of, in southeast corner of east pier of iron bridge over south fork of Hughes River; bronze tablet stamped "814 Grafton".. | 814.348 |
| Grove, in northwest corner of cut-stone foundation of residence of C. A. Van Horn; bronze tablet stamped "918 Grafton"..... | 917.608 |
| Conings post office, southeast corner of cut-stone foundation to store owned by H. W. Ryner; bronze tablet stamped "789 Grafton"..... | 788.618 |
| Troy, 0.25 mile west of, in northeast abutment of iron bridge over mouth of Cove Creek; bronze tablet stamped "758 Grafton"..... | 758.864 |

**From Gooseneck south along highways to Hazel Green, thence southeast to Troy.**

| | |
|---|---|
| Pullman, 0.2 mile west of, in outcrop of rock at northeast angle of crossroads; bronze tablet stamped "843 Grafton"..... | 843.426 |
| Slab, 0.3 mile northwest of post office, left side of road, 100 feet north of small run, on top of outcrop of rock; chiseled square..... | 791.545 |
| Hazel Green, near northwest corner of store and post office, in stone foundation; bronze tablet stamped "742 Grafton"..... | 743.154 |
| Lawford, in northeast corner of stone house of D. G. Law; bronze tablet stamped "820 Grafton"..... | 820.444 |
| Newberne, 0.5 mile above, in southeast corner of foundation to schoolhouse at forks of road; bronze tablet stamped "896 Grafton"..... | 897.099 |
| Coxs Mills (Troy dist. 6), northeast corner of stone foundation of schoolhouse; bronze tablet stamped "788 Grafton"..... | 788.623 |

**Burnsville, Crawford, Durbin, Gassaway, Glenville, Hacker Valley, Pickens, Sago, and Sutton Special quadrangles.**

**BRAXTON, CLAY, GILMER, LEWIS, NICHOLAS, RANDOLPH, UPSHUR, AND WEBSTER COUNTIES.**

The leveling was done in Burnsville quadrangle in 1902 by G. L. Gordon, in Crawford quadrangle in 1902 by Gordon, in 1911 by C. W. Arnold, in Durbin and Hacker Valley quadrangles in 1913 by K. E. Schlachter, in Gassaway quadrangle in 1906 by D. D. Teets, in 1908 by E. S. Dawson, and in 1915 by H. S. Senseney, in Glenville quadrangle in 1903 by F. T. Willis, in 1905 by Gordon, in Pickens quadrangle in 1912 by L. F. Biggs and in 1913 by Schlachter, in Sago quadrangle in 1901 by Gordon, in 1911 by Arnold, and in 1912 by Biggs, in Sutton Special quadrangle in 1902 by Gordon and in 1908 by Dawson.

**BURNSVILLE 15′ (SUTTON 30′) QUADRANGLE.**

[Latitude 38° 45′–39°; longitude 80° 30′–80° 45′.]

**From Arnoldsburg southwest along Baltimore & Ohio R. R. to Burnsville, thence northwest along highway to Linn.**

| | Feet. |
|---|---|
| Confluence, 2.6 miles northeast of, 4.6 miles southwest of Arnold, on Second Big Run, on southwest corner of east abutment of railroad bridge 43 A; chiseled square..... | 802.93 |
| Confluence, 0.4 mile northeast of, opposite forks of county road, on north corner of pier of railroad bridge 46 A; chiseled square..... | 777.01 |
| Confluence, 0.8 mile southwest of, at forks of road, on northwest corner of west pier of railroad bridge 47 A; chiseled square..... | 775.42 |

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| | Feet. |
|---|---|
| Burnsville, 0.5 mile north of, in top of east corner of northeast pier of railroad bridge 50 A over Little Kanawha River; bronze tablet stamped "765 Grafton" | 764.366 |
| Stouts Mills, iron bridge over Little Kanawha River, in northwest corner of east abutment; bronze tablet stamped "750 Grafton" | 749.624 |

**From Burnsville southeast along road to Bulltown, thence west to point 1 mile north of Rollyson.**

| | |
|---|---|
| Bulltown, in north face of west abutment of covered bridge over Little Kanawha River, 9.8 feet below bridge seat and 8.1 feet west of corner; bronze tablet stamped "777 Grafton" | 776.538 |

**From Burnsville south along Baltimore & Ohio R. R. and highways to Heaters.**

| | |
|---|---|
| Burnsville, 1.7 miles south of, on northwest corner of south abutment of railroad bridge 52 A over Saltlick Creek; chiseled square | 764.89 |
| Cogers, 3.4 miles south of, on northeast corner of south abutment of railroad bridge 55 D over Saltlick Creek; chiseled square | 785.46 |
| Rollyson, 0.5 mile north of, in bridge seat at northeast corner of south abutment of railroad bridge 57 D; bronze tablet stamped "797 Grafton" | 796.684 |
| Heaters, on southeast corner of west abutment of highway bridge over O'Brien Fork; chiseled square | 864.97 |

## GLENVILLE 15′ (SUTTON 30′) QUADRANGLE.

[Latitude 38° 45′–39°; longitude 80° 45′–81°.]

**From Sand Fork west along highway via Glenville to Dekalb.**

| | |
|---|---|
| Glenville, 1.4 miles east of, on stone at southeast corner of iron bridge over mouth of Stewart Creek; chiseled square | 721.41 |
| Glenville, in top stone of middle pier on east side of bridge over Little Kanawha River; bronze tablet stamped "733 Grafton" | 733.623 |
| Glenville, 0.7 mile west of, on southeast corner of east abutment to bridge at mouth of Sycamore Run; square | 715.82 |
| Glenville, 3.7 miles west of, on northwest corner of west abutment to iron bridge across Leading Creek near mouth; square | 723.46 |
| Dekalb, 3.4 miles east of, on northwest corner of stone abutment to bridge across Sinking Creek; chiseled square | 711.44 |
| Dekalb, just back of post office, in southwest corner of residence on second course of masonry foundation; bronze tablet stamped "715 Grafton" | 715.695 |

**From Glenville southeast along highway to Cutlips.**

| | |
|---|---|
| Glenville, 4.2 miles south of, on northwest abutment of iron bridge over Cedar Creek; square cut | 740.18 |
| Cedarville, 5.3 miles northwest of, on stone at ford over Cedar Creek; chiseled square | 746.57 |
| Cedarville, at front of residence of W. H. Jack, on west side of cut-stone steps, in big stone; aluminum tablet stamped "802 Grafton" | 802.813 |
| Cedarville, 6 miles southeast of, near house east of road, on big stone; chiseled square | 822.79 |
| Hope, about 2.5 miles east of, at forks of road leading up Toms Run, near hickory tree, on big rock; chisel mark | 833.67 |
| Cutlips, in southwest corner of cut-stone foundation of church; aluminum tablet stamped "851 Grafton" (elevation possibly 1 foot too high) | 851.970 |



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**From mouth of Toms Run west along highway via Hope to Stumptown, thence north via Normantown to Dekalb.**

| | Feet. |
|---|---|
| Hope post office, on stone foundation of old log stable; chiseled square.... | 989.274 |
| Hope, 1.4 miles southwest of, east of road fork at mouth of Leopard Run, in southwest corner of stone foundation to house occupied in 1903 by John Seal and owned by C. F. Gerwig; aluminum tablet stamped "861 Grafton" | 861.663 |
| Progress, 1 mile northwest of, near mouth of Piper Fork on Crooked Fork, at forks of road, on stone foundation of schoolhouse, at southwest corner; chiseled square | 868.14 |
| Perkins, to right of road at forks, on large stone; chiseled square | 771.55 |
| Perkins, 3.3 miles west of, at forks of road, in southwest corner of stone foundation of schoolhouse; aluminum tablet stamped "741 Grafton" | 742.043 |
| Stumptown, 0.5 mile east of, at forks of road, in southeast corner of east pier of iron bridge over Left Fork of Steer Run; bronze tablet stamped "714 Grafton" | 714.752 |
| Normantown, on stone at forks of road up Steer Run; chiseled square | 737.25 |
| Lettergap, at south angle of crossroads, in northwest face of foundation stone at north corner of dwelling of A. S. Westfall; aluminum tablet stamped "827 Grafton" | 827.849 |

## SUTTON SPECIAL (SUTTON 30′) QUADRANGLE.

[Latitude 38° 30′–38° 45′; longitude 80° 30′–80° 45′.]

**From Heaters south along Baltimore & Ohio R. R. to Sutton, thence along highway and across country to Birch River.**

| | |
|---|---|
| Shaversville (Flatwoods post office), Dr. B. M. Squire's drug store, 0.8 foot west and 3.5 feet south of northwest corner; iron post stamped "1071 Grafton" | 1,070.810 |
| Flatwoods, 1.6 miles south of, northeast corner of south abutment of railroad bridge 64 B; chiseled square | 1,051.95 |
| Sutton, 2.3 miles north of (3.7 miles south of Flatwoods), on northeast corner of south abutment of railroad bridge 66 D; chiseled square | 863.28 |
| Sutton, at suspension bridge over Elk River, in north face of north tower, 0.9 foot above foundation and 2.4 feet east of corner; bronze tablet stamped "843 Grafton" | 842.677 |
| Littlebirch, 2 miles west of, 160 feet northwest of Bear Run, 50 feet northwest of road forks, north of road, in outcrop of rock; bronze tablet stamped "1073 Grafton" | 1,072.775 |
| Birch River, 300 feet north of post office, 0.2 mile south of mouth of Powell Creek on east side, opposite Ivan Brothers and Brown's store, in outcrop of rock; aluminum tablet stamped "1108 Knwa") | 1,108.565 |

**From Birch River eastward along highway to Erbacon, thence north along Baltimore & Ohio R. R. to Gillespie.**

| | |
|---|---|
| Birch River post office, 3 miles east of, 150 feet west of Birch Valley schoolhouse (No. 24), 170 feet east of ford, north of river and road, in east end of large bowlder; aluminum tablet stamped "1186" | 1,186.291 |
| Waggy post office, 0.5 mile west of, south of ridge road, 300 feet west of Tram road and water tank, 0.3 mile east of road forks, in bowlder; aluminum tablet stamped "2085" | 2,084.728 |
| Waggy post office, 1 mile east of, north of county road, south of Tram road, near summit, 0.4 mile from where Tram road leaves ridge road, in outcrop of rock; aluminum tablet stamped "2176" | 2,176.059 |

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| | Feet. |
|---|---|
| Erbacon, 100 feet east of post office, 100 feet south of station, in abutment at northwest end of Baltimore & Ohio bridge over mouth of Missouri Creek; aluminum tablet stamped "1518" | 1,517.854 |
| Defoe, in front of station; top of rail | 1,401 |
| Erbacon, 2.7 miles north of, east of railroad, 0.1 mile north of Defoe station, 150 feet south of milepost 81, in top of stone culvert; aluminum tablet stamped 1373" | 1,373.151 |
| Erbacon, 3.7 miles north of, west of railroad, east of Laurel Creek, 150 feet south of milepost 80, on outcrop of sand rock; chiseled square marked "1286" | 1,285.97 |
| Erbacon, 4.7 miles north of, west of railroad, 200 feet south of milepost 79, on sand rock; chiseled square marked "1203" | 1,203.03 |
| Prestonia post office, 0.1 mile north of, near mouth of Brook Run, in top stone of abutment to railroad bridge over Laurel Creek; aluminum tablet stamped "1137" | 1,137.121 |
| Centralia, 400 feet south of post office, opppsite G. E. & H. A. Hyer's store, 40 feet south of road crossing, 400 feet south of station, 20 feet east of railroad, 0.1 mile south of mouth of Laurel Creek, in stone culvert; aluminum tablet stamped "945" | 944.819 |
| Centralia, 1.1 miles north of, east of railroad, west of Elk River, opposite rock cliff, 200 feet south of milepost 48, on outcrop of sand rock; chiseled square marked "952" | 951.71 |
| Bakers Run, 1 mile north of, west of railroad, 150 feet south of house, opposite mouth of Holly River, in outcrop of sand rock in bank; aluminum tablet stamped "943" | 942.686 |
| Bakers Run, 2 miles north of, south of railroad and river, 1 mile east of Holly River Junction, on outcrop of sand rock; chiseled square marked "914". | 913.30 |
| Gillespie station, 0.5 mile south of, 40 feet south of milepost "C 69 & R-53," east of railroad, west of county road, 430 feet north of road crossing, in east end of culvert; aluminum tablet stamped "890" | 889.865 |
| Gillespie, in front of station; top of rail | 890 |
| Gillespie, 0.5 mile north of, on edge of county road near summit, on outcrop of sand rock, chiseled square; marked "930" | 929.99 |
| Gillespie, 1.2 miles northwest of, west of trail, opposite field, 0.2 mile south of house, on outcrop of rock, chiseled square; marked "886" | 885.40 |
| Gillespie, 2.2 miles northwest of, west of trail, on top of summit 0.5 mile west of house, in rock cliff; aluminum tablet stamped "945" | 944.475 |

**From point near Removal west along West Virginia Midland R. R. to Bakers Run.**

| | |
|---|---|
| Fuccy, ¼ mile southeast of, along highway, in bowlder 10 feet west of road, west of fence; bronze tablet stamped "962" | 961.652 |
| Irwin, 0.3 mile west of, in rock north margin of track; bronze tablet stamped "924" | 924.663 |

## CRAWFORD QUADRANGLE.

[Latitude 38° 45′–39°; longitude 80° 15′–80° 30′.]

**From Brownsville south along Baltimore & Ohio R. R. to Arnold.**

| | |
|---|---|
| Rohrbough, in front of station; top of rail | 1,036.2 |
| Roanoke, 0.4 mile north of, on southeast corner of north abutment of iron bridge over Canos River; chiseled square | 1,047.95 |
| Roanoke, 1.8 miles southwest of, 0.6 mile northeast of Arnold, in southwest corner of southwest pier of railroad bridge No. 38 B over Monongahela River; bronze tablet stamped "1,058 Grafton" | 1,057.670 |

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**From Sago west along Coal & Coke R. R. to Jacksonville, thence along highway to Arnold station (Baltimore & Ohio R. R.).**

| | Feet. |
|---|---|
| Sago, 1.7 miles west of, 10 feet south of track, on large bowlder; chiseled square, marked "1442" | 1,441.31 |
| Adrian, in front of station; top of clearance post, marked "1426" | 1,426.09 |
| Adrian, 0.5 mile west of, 150 feet west of crossing, 100 feet north of wagon road, 6 feet north of track, in rock ledge; bronze tablet stamped "1432" | 1,431.280 |
| Adrian, 2.3 miles west of, 30 feet north of track in cut; chiseled square on large bowlder, marked "1481" | 1,480.61 |
| Abbott, in front of station; top of rail | 1,493.70 |
| Abbott, 0.3 mile west of, south side of entrance to tunnel, in brick wall; bronze tablet stamped "1523" | 1,522.678 |
| Abbott, 1.6 miles west of, on south end of west abutment of railroad bridge; chiseled square, marked "1472" | 1,471.76 |
| Abbott, 3.5 miles west of, 10 feet north of track, on east end of iron drain pipe, marked "1515" | 1,514.16 |
| Frenchton, 50 feet west of station, in south end of east abutment of railroad bridge; bronze tablet stamped "1495" | 1,494.623 |
| Frenchton, 1.1 miles west of, 5 feet south of track, chiseled square in rock ledge, marked "1411" | 1,410.61 |
| Frenchton, 2.1 miles west of, 5 feet south of railroad track, chiseled square on rock ledge, marked "1327" | 1,326.56 |
| Frenchton, 3 miles west of, 30 feet north of track, on west side of hollow, in large bowlder; bronze tablet stamped "1241" | 1,240.292 |
| Crawford, in front of station; top of rail | 1,103. |
| Crawford, 0.5 mile west of, 5 feet north of railroad, chiseled square on large bowlder, marked "1090" | 1,089.87 |
| Walkerville, 60 feet west of station, in south end of east abutment of railroad bridge; bronze tablet stamped "1088" | 1,087.078 |
| Walkerville, 1.1 miles west of, 6 feet south of track, 500 feet east of wagon bridge; chiseled square on large bowlder, marked "1081" | 1,080.46 |
| Walkerville, 2.2 miles west of, on north end of east bridge seat of railroad bridge; chiseled square, marked "1074" | 1,073.74 |
| Jacksonville, 0.2 mile north of, 6 feet east of wagon road, in rock ledge, bronze tablet stamped "1140" | 1,139.094 |
| Jacksonville, 1.4 miles north of, in east edge of road; chiseled square in large bowlder, marked "1264" | 1,263.69 |
| Arnold, in front of station; top of sill | 1,102.1 |

**From Walkerville along highway south to Duffy, thence east to Selbyville.**

| | |
|---|---|
| Walkerville, 1.5 miles south of, 10 feet east of railroad track; nail in root of maple tree, marked "1091" | 1,090.83 |
| Walkerville, 2.7 miles south of, in northwest edge of wagon road, 150 feet southwest of road crossing; chiseled square on rock bowlder, marked "1107" | 1,106.47 |
| Walkerville, 3.8 miles south of, 20 feet northwest of track, 300 feet northwest of house, in rock cliff; bronze tablet stamped "1134" | 1,132.880 |
| Ireland, 0.7 mile south of, 10 feet east of railroad, 15 feet northeast of road crossing; chiseled square on bowlder, marked "1242" | 1,241.77 |
| Duffy, 250 feet northeast of church and schoolhouse, 60 feet north of road at forks south, in bowlder in field; bronze tablet stamped "1208" | 1,207.399 |
| Duffy, 1 mile south of, 10 feet south of stream crossing, on large bowlder 4 feet east of road; chiseled square, marked "1065" | 1,064.58 |

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| | Feet. |
|---|---|
| Duffy, 2.1 miles south of, at Bablin, in west side of concrete bridge over Glady Fork at mouth; bronze tablet stamped "998" | 997.130 |
| Duffy, 3.1 miles southeast of, 2 feet north of road; chiseled square on rock ledge, marked "1090" | 1,089.12 |
| Ingo, at forks of road, 10 feet east of store; chiseled square on large bowlder, marked "1038" | 1,037.28 |
| Ingo, 1 mile east of, at road forks, 2 feet south of; chiseled square on bowlder marked "1168" | 1,166.88 |
| Ingo, 2.3 miles east of, 3 feet north of road, in large bowlder; bronze tablet stamped "1126" | 1,125.492 |
| Ingo, 3.5 miles east of, 3 feet south of road, on large bowlder; chiseled square marked "1509" | 1,508.00 |
| Ingo, 3.9 miles east of, at road forks, 6 feet north of; chiseled square on bowlder marked "1644" | 1,643.62 |
| Kanawha Head, 800 feet northeast of, 20 feet northeast of road forks; chiseled square on large bowlder marked "1705" | 1,704.30 |
| Kanawha Head, 1 mile east of, 30 feet north of road, 50 feet southwest of house, in large bowlder; bronze tablet stamped "1853" | 1,851.840 |
| Kanawha Head, 1.9 miles east of, 30 feet east of road; chiseled square on bowlder marked "1714" | 1,713.19 |
| Kanawha Head, 3.5 miles east of, at road forks, 3 feet south of; chiseled square on bowlder marked "1785" | 1,784.39 |
| Kanawha Head, 4.6 miles east of, in triangle at road forks, in large bowlder; bronze tablet stamped "2125" | 2,124.243 |
| Kanawha Head, 6 miles east of, 30 feet west of stream crossing, 3 feet south of road; chiseled square on bowlder marked "2214" | 2,213.33 |
| Kanawha Head, 7.4 miles east of, at north side of road, in rock ledge; bronze tablet stamped "2350" | 2,349.384 |
| Selbyville, in west end of north abutment of railroad bridge No. 64A; bronze tablet stamped "1888" | 1,887.493 |
| Chemical station, spike in telegraph pole, marked "1875" | 1,874.70 |

### DURBIN QUADRANGLE.

[Latitude 38° 30′–38° 45′; longitude 79° 45′–80°.]

**From Ward northeast along West Virginia Midland R. R. to Valley Bend.**

| | |
|---|---|
| Ward, in front of station; top of rail | 2,052.5 |
| Huttonsville, 1.4 miles southwest of, near third milepost, painted rail | 2,037.7 |
| Huttonsville, at station Western Maryland R. R.; top of rail (w), painted "2024.2" | 2,023.8 |
| Mill Creek, Western Maryland R. R. bridge over Valley River, in stone seat of, southwest corner; bronze tablet stamped "2013" | 2,013.047 |

### GASSAWAY 15′ (SUTTON 30′) QUADRANGLE.

[Latitude 38° 30′–38° 45′; longitude 80° 45′–81°.]

**From point near Sutton west along highway to Gassaway, thence southwest along Coal & Coke R. R. to Otter.**

| | |
|---|---|
| Sutton, 3 miles west of, 0.2 mile west of Buffalo Ford, 800 feet east of old sawmill, in abutment of small bridge over Mud Run; aluminum tablet stamped "822" | 821.914 |
| Gassaway, 0.5 mile east of, in second stone of abutment, at northeast end of railroad bridge over Elk River; aluminum tablet stamped "839" | 839.002 |
| Gassaway, in front of station; top of south rail | 833.7 |

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| | Feet. |
|---|---|
| Gassaway, 0.5 mile west of, south of railroad, at end of yard limit, on sandstone in culvert over run; chiseled square marked "831" | 831.21 |
| Gassaway, 1.5 miles west of, south of railroad and Elk River, on doorstep of house; chiseled square marked "833" | 832.71 |
| Gassaway, 2.6 miles west of, south of railroad and Elk River, 0.3 mile south of sawmill, in outcrop of sand rock; aluminum tablet stamped "831" | 831.193 |
| Gassaway, 3.6 miles southwest of, south of railroad and Elk River, 70 feet east of hollow, on outcrop of sand rock; chiseled square marked "829" | 828.64 |
| Gassaway, 4.6 miles southwest of, south of railroad and Elk River, 0.1 mile west of road crossing on rock cliff; chiseled square marked "825" | 824.63 |
| Gassaway, 5.6 miles southwest of, west of railroad and Elk River, 200 feet from mouth of Lower Rockcamp Run, opposite sawmill, in outcrop of rock; aluminum tablet stamped "825" | 825.193 |
| Gassaway, 6.6 miles west of, north of railroad and south of Elk River, on outcrop of sand rock; chiseled square marked "823" | 822.35 |
| Frametown, 200 feet south of post office, in southeast abutment of county iron bridge over Elk River; aluminum tablet stamped "817" | 816.582 |
| Frametown, 1 mile west of post office, 0.2 mile north of Rockton station, east of railroad and Elk River, on rock cliff; chiseled square marked "817" | 817.14 |
| Rockton, 1.9 miles south of, southeast of railroad and river, in outcrop of sand rock; aluminum tablet stamped "813" | 812.612 |
| Glendon, 0.5 mile south of post office, on southwest abutment of railroad bridge over Birch River; chiseled square marked "811" | 810.34 |
| Glendon, 1.9 miles south of, southeast of railroad, near bend, on outcrop of sand rock; chiseled square marked "806" | 806.09 |
| Strange Creek post office, 200 feet north of station, in northeast abutment of railroad bridge over mouth of Strange Creek; aluminum tablet stamped "807" | 806.653 |
| Strange Creek post office, 1 mile west of, north of railroad, near bend south of river, on outcrop of sand rock; chiseled square marked "807" | 807.12 |
| Villa Nova, 140 feet north of store and station, opposite house, west of railroad, east of river, in southwest corner of culvert; aluminum tablet stamped "787" | 787.088 |
| Villa Nova, 1.6 miles southwest of, south of railroad, 250 feet east of Frame Run, on rock cliff; chiseled square marked "795" | 794.34 |
| Ira, 0.5 mile west of post office, 250 feet south of station, in northeast abutment of railroad bridge over mouth of Grove Run; aluminum tablet stamped "788" | 787.900 |
| Ira, 1 mile southwest of, west of railroad, east of river, 300 feet north of sawmill and hollow to west, on rock bowlder, chiseled square; marked "784" | 784.16 |
| Ira, 2.1 miles southwest of, on southeast abutment of bridge over Jumping Gut, chiseled square; marked "780" | 779.87 |
| Ira, 3.1 miles southwest of, in top of stone in south end of culvert; aluminum tablet stamped "772" | 771.627 |

**From Strange Creek southeast to Birch River post office.**

| | |
|---|---|
| Strange Creek post office, 1 mile southeast of, 50 feet east of road crossing, 300 feet east of Upper Mill Creek, 100 feet east of road forks, on outcrop of sand rock, chiseled square; marked "818" | 818.30 |
| Strange Creek, 2 miles southeast of, south of road in bank, 180 feet west of road crossing, opposite house and hollow, in outcrop of sand rock; aluminum tablet stamped "879" | 878.883 |

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| | Feet. |
|---|---|
| Jennings, 0.5 mile east of post office, west of railroad, on edge of creek, at west end of trestle, on rock, chiseled square; marked "898" | 897.66 |
| Jennings, 2.4 miles southeast of, east of railroad, north of Strange Creek, 70 feet south of house, opposite hollow between trestles, in outcrop of sand rock; aluminum tablet stamped "993" | 993.259 |
| Jennings, 3.6 miles southeast of, 100 feet north of Trace Fork at mouth, east of railroad and creek, on sand rock; chiseled square, marked "1044" | 1,043.13 |
| Jennings, 4.6 miles southeast of, east of road, 300 feet south of road to west, on sand rock; chiseled square, marked "1223" | 1,222.78 |
| Jennings, 5.5 miles southeast of, between Ball schoolhouse and New Hope Church, 10 feet south of road fork, 300 feet west of Morris's store, in hollow between Hughes Mountain and Kenna Mountain, in outcrop of sand rock; aluminum tablet stamped "1253" | 1,252.955 |
| Jennings, 7.6 miles southeast of, 0.5 mile east of Big Birch Ford, opposite hollow to right, north of river, on outcrop of sand rock; chiseled square, marked "1106" | 1,105.36 |

**From Ivydale southeast to Buffalo Creek.**

| | |
|---|---|
| Ivydale, 3.2 miles southeast of, on ridge from Ivydale to Buffalo Creek, northeast of road, in large stone; aluminum tablet stamped "1308" (this elevation may be a foot too great) | 1,306.559 |
| Ivydale, 4.4 miles southeast of, east side of road, on ledge; chiseled square. | 1,299.27 |

**From Frametown northwest to mouth of Joes Fork of Steer Creek.**[1]

| | |
|---|---|
| Frametown, 0.5 mile north of post office, southwest of road, on edge of bank, 0.5 mile north of mouth of Big Run, 100 feet west of Big Run schoolhouse, on sand rock; chiseled square, marked "827" | 827.21 |
| Frametown, 3.3 miles northwest of, south of run, north of road, 100 feet east of private road to north, 300 feet west of old store, on small rock; chiseled square, marked "977" | 977.03 |
| Dessie, 0.5 mile northeast of post office, 130 feet northwest of road forks, 200 feet east of Joes Fork at mouth, 10 feet west of foot log, opposite hollow, in outcrop of sandstone; aluminum tablet stamped "908" | 908.053 |

## HACKER VALLEY QUADRANGLE.

[Latitude 38° 30′–38° 45′; longitude 80°–80° 15′.]

**From Bablin south along highway to Jumbo, thence west to Diana.**

| | |
|---|---|
| Bablin, 1 mile south of, at junction of Little Kanawha River and Wildcat Creek, in west side of north end of wire footbridge; copper nail "972.6" | 972.33 |
| Wildcat post office, 400 feet east of, in rock north side of road; chiseled square, painted "9502" | 949.84 |
| Bois post office, at south side of ford of Right Fork of Little Kanawha River, in bowlder; bronze tablet stamped "1079" | 1,079.147 |
| Bois post office, 1.6 miles south of, in gap at head of Williams Camp Run, in root of oak, south side of road; copper nail, painted "1611.5" | 1,611.31 |
| Bois post office, 2 miles south of, east margin of road in rock; chiseled square, painted "1513.9" | 1,513.65 |
| Wheeler post office, 1 mile north of, at run crossing, east margin of road, at junction with Back Fork road, in ledge; bronze tablet stamped "1438" | 1,437.317 |
| Wheeler post office, 0.3 mile south of, in rock east margin of road; chiseled square, painted "1474.1" | 1,473.83 |

[1] Mean of two runnings.

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| | Feet. |
|---|---|
| Pugh, 0.3 mile north of, in bowlder west margin of road; bronze tablet stamped "1450" | 1,450.200 |
| Hacker Valley, ½ mile southwest of, along road to Pugh, at ford over Back Fork, in east end of footbridge; copper nail painted "1476.4" | 1,476.14 |
| Hodam, 0.3 mile north of, along road to Hacker Valley, in tree stump in field 10 feet west of road center, 110 feet south of R. F. D. "29"; copper nail, painted "1602.4" | 1,602.25 |
| Hodam, 0.2 mile south of, at road fork, in bowlder east margin of road; bronze tablet stamped "1658" | 1,657.323 |
| Hodam, 0.8 mile south of, along road to Jumbo, in rock east margin of road, chiseled square painted "1853.0" | 1,851.87 |
| Hodam, 1.7 miles south of, at road corner, in ledge in triangle of roads, chiseled square painted "2420.7" | 2,420.61 |
| Jumbo, 0.9 mile north of, on road to Hodam, in rock west margin of road; chiseled square painted "1949.0" | 1,948.84 |
| Jumbo post office, 400 feet east of, at road corner in bowlder north side of footbridge over Holly River; bronze tablet stamped "1544" | 1,543.698 |
| Jumbo post office, 1.2 miles west of, along Holly River, 230 feet south of ford, at mouth of Mud Lick Run, in root of tree; copper nail, painted "1436.3" | 1,436.07 |
| Diana, 2 miles east of, up Holly River, in large bowlder north end of footbridge; chiseled square, painted "1356" | 1,355.74 |

**From point 2 miles west of Removal southeast along West Virginia Midland R. R. to point 1 mile southeast of Summit.**

| | |
|---|---|
| Removal (Salisbury station) 2 miles west of, in bowlder north side of railroad track; bronze tablet stamped "1049" | 1,048.283 |
| Removal (Salisbury station) 100 feet west of post office, in ledge south side of West Virginia Midland Railroad track; bronze tablet stamped "1095" | 1,095.182 |
| Diana, at ford of Holly River between railroad station and post office, in bowlder south edge of road, west of river; bronze tablet stamped "1241" | 1,240.426 |
| Diana, at intersection of old railroad grade and road to Jumbo, in stone west margin of road, chiseled square painted "1264.0" | 1,263.80 |
| Diana, 2.6 miles southeast of, at railroad water station, in bowlder 75 feet west of track, 50 feet south of tank; bronze tablet stamped "1638" | 1,637.761 |
| Summit, 1 mile southeast of, in ledge east margin of track, 500 feet southeast of "incline"; bronze tablet stamped "1857" | 1,856.490 |

**Near southeast corner of quadrangle.**

| | |
|---|---|
| Bernardstown, 1 mile east of, north margin of road, in shale; chiseled square, painted "1753.6" | 1,753.33 |
| Bergoo, 3.1 miles northeast of, at Chestnut Bottom Ford School, on south side of river, at ford, 10 feet south of road in rock; bronze tablet stamped "1906" | 1,905.831 |

**From point near Newton south along Baltimore & Ohio R. R. to point near Silica.**

| | |
|---|---|
| Newton, 1.5 miles south of, at sixty-seventh milepost, at north side of third joint north of; top of east rail, painted "2001.8" | 2,001.5 |
| Craddock, 0.1 mile north of, in east corner of south abutment of railroad bridge 67 A, bronze tablet stamped "2040" | 2,039.911 |
| Arvondale Junction, on railroad bridge 70 A; top of southernmost bolt in east guardrail, painted "2238.4" | 2,238.31 |
| Arvondale Junction, 1 mile south of, 14 rails south of seventy-first milepost, at north side of joint; top of east rail, painted "2315.3" | 2,315.0 |

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**From Hacker Valley east along Pickens & Hacker Valley R. R. to Pickens, Baltimore & Ohio R. R. (There is an error of 1 foot to be located in this line.)**

| | Feet. |
|---|---|
| Hacker Valley, in southeast corner stone of residence of S. J. Cutlip, bronze tablet stamped "1501" [1] | 1,500.848 |
| Siding, 1 mile east of Hacker Valley, 250 feet east of switch, top of south rail on east edge of joint, painted "1616.9" [1] | 1,616.7 |
| Hacker Valley, 3.2 miles east of, in rock north margin of track; bronze tablet stamped "1827" [1] | 1,826.406 |
| Hacker Valley, 6.5 miles east of, in rock north margin of track; bronze tablet stamped "2429" [1] | 2,429.203 |

## PICKENS QUADRANGLE.

[Latitude 38° 30′–38° 45′; longitude 80°–80° 15′.]

**From West Huttonsville southwest along highway to Star, thence northwest along lumber railroad to Palace Valley.**

| | |
|---|---|
| West Huttonsville, 50 feet south of post office, west edge of road, in front of L. M. Yickfoose's residence, in bowlder; bronze tablet stamped "2322 B 7 1912" | 2,321.237 |
| West Huttonsville, 0.8 mile southwest of, north edge of road; chisel point on bowlder, chiseled "2617 U. S." | 2,616.94 |
| West Huttonsville, 2 miles southwest of, 50 feet west of Left Fork of Middle Fork; spike in base of 12-inch maple tree, scribed "2473 U. S." | 2,472.25 |
| Summit of mountain, 1.4 miles east of, north edge of road; copper nail in base of 30-inch linden tree, scribed aluminum tag stamped "2824 U. S." | 2,823.76 |
| Summit of mountain, 0.2 mile east of, south side of road, in top of large bowlder; bronze tablet stamped "3220 B 8 1912" | 3,219.231 |
| Summit of mountain, west of road; chisel point on bowlder, chiseled "3280 U. S." | 3,279.79 |
| Star, 2.1 miles west of, north edge of road, opposite first house from railroad, chisel point on bowlder, chiseled "3016 U. S." | 3,016.04 |
| Star, 80 feet south of West Huttonsville road crossing, 10 feet west of track, in very large rock; bronze tablet stamped "2308 B 9 1912" | 2,307.783 |
| Palace Valley, 1.7 miles southeast of, 500 feet west of switch, south edge of track; chisel point on bowlder, chiseled "2205 U. S." | 2,204.90 |

**From Hacker Valley east along Pickens & Hacker Valley R. R. to Pickens, portion of line. (There is an error of 1 foot to be located in this line. See Hacker Valley quadrangle for other bench marks.)**

| | |
|---|---|
| Pickens, 3.5 miles west of, 500 feet west of railroad and road crossing in gap, in rock south of margin of track; bronze tablet stamped "2883" [1] | 2,883.095 |

**From Selbyville south along Baltimore & Ohio R. R. to point near Newton.**

| | |
|---|---|
| Newton, 0.5 mile south of, at sixty-sixth milepost, at north side of third joint south of; top of east rail, painted "1929.6" | 1,929.4 |

**From Silica southeast along Baltimore & Ohio R. R. to Pickens.**

| | |
|---|---|
| Silica, 2,300 feet south of, in west corner of north abutment of railroad bridge 72 A, at seventy-second milepost; bronze tablet stamped "2385" | 2,384.70 |
| Pickens, 2 miles north of, at seventy-third milepost, at south side of joint opposite; top of east rail, painted "2500" | 2,499.7 |

[1] Or 1 foot higher.

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| | Feet. |
|---|---|
| Pickens, 1 mile north of, at seventy-fourth milepost, at south side of first joint north of; top of west rail, painted "2615.7" | 2,615.7 |
| Pickens, in top stone in northwest corner of retaining wall at the residence of Mr. Wasmer; bronze tablet stamped "2701" | 2,700.919 |
| Pickens, 0.5 mile south of, on road to Florence, in rock west margin of highway; chiseled square, painted "2802.3" | 2,802.346 |

**From point near Samp east along highway to Monterville, thence north and west to Pickens.**

| | |
|---|---|
| Samp post office, 3.5 miles west of, in Big Run, in ledge north side of road; bronze tablet stamped "2022" | 2,021.327 |
| Samp post office, 1.2 miles west of, south edge of road, in rock; raised chiseled square, painted "2178.6" | 2,178.23 |
| Samp post office, 0.5 mile east of, 350 feet below Whittakers Falls, in ledge north side of road; bronze tablet stamped "2164" | 2,163.708 |
| Samp post office, 1.8 miles east of, up Elk River road, in rock south margin of road; raised chiseled square, painted "2271.2" | 2,270.82 |
| Store, junction of Valley and Dry forks, 0.3 mile west of, down Elk River road, in rock north margin of road; chiseled square, painted "2270.2" | 2,269.72 |
| Blue Spring, 2.1 miles west of, at fork of road, at junction of Valley and Dry forks, in rock north edge of road; bronze tablet stamped "2299" | 2,298.369 |
| Blue Spring post office, 1.1 miles west of, in rock north margin of road, chiseled square, painted "2525.5" | 2,525.10 |
| Monterville post office, 0.3 mile west of, down Valley Fork road, ¼ mile west of summit, in rock in north margin of road; bronze tablet stamped "2949" | 2,948.457 |
| Monterville post office, in foundation post at southeast corner of old store, at road corner; copper nail, painted "2998.3" | 2,997.94 |
| Monterville post office, 1.3 miles northwest of, along pike, at road corner to Logan's farm, in bed rock northwest corner; chiseled square, painted "3234.5" | 3,234.12 |
| Monterville post office, 2 miles northwest of, along Pickens road, 0.3 mile north of pike corner, west margin of road, in bowlder; bronze tablet stamped "3237" | 3,237.067 |
| Monterville post office, 3.3 miles northwest of, along Pickens road, in rock west margin of road; chiseled square painted "3703.9" | 3,703.56 |
| Monterville post office, 5.8 miles northwest of, along Pickens road, in rock in east margin of road; chiseled square painted "3722.3" | 3,722.00 |
| Monterville post office, 7 miles north of, along Pickens road, under Whitman Knob in rock east margin of road; bronze tablet stamped "3735" | 3,734.868 |
| Pickens, 6.2 miles southeast of, along road to Monterville, in rock south margin of road; chiseled square painted "3655.6" | 3,655.23 |
| Pickens, 5.3 miles southeast of, along road to Monterville, in ledge south edge of road, 500 yards southeast of Zehnder's farm; bronze tablet stamped "3775" | 3,774.348 |
| Pickens, 4.2 miles southeast of, along Monterville Road, at 90° bend in road in front of farm of L. Wuchner, north edge of road, in rock; chiseled square, painted "3621.1" | 3,620.77 |
| Pickens, 2.5 miles southeast of, along Monterville Road, under Turkey Bone triangulation station in rock east edge of road, at root of tree; bronze tablet stamped "3582" | 3,581.356 |
| Pickens, 1.1 miles southeast of, along Monterville Road, 0.7 mile south of fork, in rock east margin of road; chiseled square, painted "3025.9" | 3,025.37 |

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**From Monterville northeast along West Virginia Midland R. R. to Leebell.**

| | Feet. |
|---|---|
| Brady Gate (1.4 miles south of Monterville), 1.5 miles east of, along Elkwater Road, in root of large white oak, north side of road; copper nail painted "2627.6" | 2,627.19 |
| Elkwater Camp No. 4, 70 feet in front of mess house, in rock between highway and railroad track; bronze tablet stamped "2395" | 2,394.079 |
| Elkwater Camp No. 4, 1.1 miles east of, 300 feet east of house, at east side of road crossing; on north rail, painted "2290.4" | 2,289.9 |
| Spangler station, 0.5 mile north of, at Elkwater switch, in ledge east side of track; bronze tablet stamped "2171" | 2,170.846 |
| Ninth milepost, at north end of third joint north of post; top of west rail, painted "2137.8" | 2,137.3 |
| Leebell schoolhouse, in face of foundation stone at northeast corner; bronze tablet stamped "2066" | 2,065.746 |

## SAGO QUADRANGLE.

[Latitude 38° 45–39°; longitude 80°–80° 15′.]

**From Buckhannon south along Baltimore & Ohio R. R. to Selbyville.**

| | |
|---|---|
| Buckhannon, Upshur County courthouse, west side of front entrance, in center of west face of base block of square column; aluminum tablet stamped "1433 Grafton" | 1,432.531 |
| Buckhannon, 3.4 miles south of, on west end of stone culvert, 10 feet west of railroad track; bronze tablet stamped "1418" | 1,417.289 |
| Buckhannon, 4.8 miles south of, 10 feet southwest of railroad track, on sandstone bowlder; chiseled square, marked "1430" | 1,429.68 |
| Buckhannon, 5.9 miles south of, 60 feet west of railroad track, 40 feet north of drain, in sandstone bowlder; bronze tablet stamped "1434" | 1,433.133 |
| Sago, on south end of west abutment of wagon bridge over Buckhannon River; chiseled square, marked "1439" | 1,438.150 |
| Sago, 1.3 miles south of, 6 feet west of track, 500 feet north of house; chiseled square on sandstone bowlder, marked "1452" | 1,451.40 |
| Sago, 1.8 miles south of, 6 feet west of railroad track, in rock ledge; bronze tablet stamped "1484" | 1,483.484 |
| Sago, 3.3 miles south of, 6 feet east of railroad; chiseled square on bowlder, marked "1565" | 1,564.58 |
| Sago, 4.6 miles south of, between railroad and wagon road, on large bowlder; chiseled square, marked "1622" | 1,621.19 |
| Ten Mile, 1.2 miles south of, 75 feet west of railroad, 75 feet east of wagon road, 100 feet southwest of milepost 54, in large bowlder; bronze tablet stamped "1659" | 1,658.860 |
| Ten Mile, 3.3 miles south of, 4 feet west of railroad track; chiseled square on rock ledge, marked "1710" | 1,709.31 |
| Beans Mill station, 6 feet west of track, 100 feet southwest of store, chiseled square on large bowlder, marked "1768" | 1,767.30 |
| Alton, 0.1 mile north of, 15 feet west of railroad track, 500 feet northwest of house on opposite side of river, in large bowlder; bronze tablet stamped "1802" | 1,801.305 |
| Alton, in front of station; top of rail | 1,799 |
| Alton, 1.5 miles south of, 6 feet west of railroad track; chiseled square on bowlder, marked "1823" | 1,822.66 |
| Alton, 2.8 miles south of, 6 feet east of track; chiseled square on large bowlder, marked "1848" | 1,848.01 |
| Alexander, 20 feet southwest of switch, 100 feet north of post office; bronze tablet stamped "1855" | 1,855.010 |

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| | Feet. |
|---|---|
| Alexander, 1.7 miles south of, 6 feet west of track, 400 feet west of house on opposite side of stream; chiseled square on ledge, marked "1868" | 1,867.97 |
| Alexander, 2.5 miles south of, at Chemical station, 10 feet east of railroad, 50 feet north of house; spike in telegraph pole, marked "1875" | 1,874.70 |
| Selbyville, in west end of north abutment of railroad bridge 64 A; bronze tablet stamped "1888" | 1,887.493 |

**From Sago east along Coal & Coke Ry. to Midvale, thence south via lumber railroad and highway to West Huttonsville.**

| | |
|---|---|
| Sago, 0.7 mile southeast of, south edge of track; spike in base of road-crossing signpost, scribed "1468 U. S." | 1,468.09 |
| Sago, 2 miles southeast of, south of track; chisel point on east foundation of water tank, scribed on upright "1570 U. S." | 1,569.59 |
| Strader, 0.9 mile south of railroad bridge over creek; chisel point on east end of south abutment; chiseled "1623 U. S." | 1,622.471 |
| Strader, 50 feet northwest of station, 30 feet east of old schoolhouse, 50 feet west of track, 50 feet north of wagon road, in bowlder; bronze tablet stamped "1695 B 1 1912" | 1,694.564 |
| Goodwin, in front of center of station; top of north rail, marked "1778 U. S." | 1,777.5 |
| Goodwin, 200 feet southeast of station, 50 feet south of track; copper nail in base of 15-inch maple tree, scribed "1765 U. S." | 1,764.55 |
| Goodwin, 0.8 mile northeast of, 20 feet east of track, 20 feet north of wagon road; chisel point on bowlder, chiseled "1810 U. S." | 1,809.47 |
| Sandrun, 1 mile west of, 500 feet east of rock quarry, 25 feet south of track; chisel point on bowlder under walnut tree, chiseled "1902 U. S." | 1,901.49 |
| Sandrun, in front of station; top of east rail, marked "1958 U. S." | 1,957.4 |
| Sandrun, 0.2 mile north of, 180 feet south of tunnel, 10 feet west of track, in ledge; bronze tablet stamped "1977 B 2 1912" | 1,977.034 |
| Bentley Wye, in front of station signboard, top of west rail | 1,962.0 |
| Midvale, 0.8 mile west of, 250 feet south of old sawmill, west of track; chisel point on bowlder, chiseled "1909 U. S." | 1,908.84 |
| Midvale, 200 feet south of station, in east end of north abutment of railroad bridge over Middle Fork River; bronze tablet stamped "1860 B 3 1912" | 1,859.308 |
| Ellamore, 150 feet east of, post office, 12 feet north of track; chisel point on bowlder, chiseled "1842 U. S." | 1,841.26 |
| Ellamore, 1.1 miles south of, west edge of track; spike in base of 20-inch chestnut tree, scribed "U. S. 1857" | 1,856.35 |
| Ellamore, 2.9 miles south of, south edge of track, north edge of river, opposite farmhouse, 500 feet west of road crossing; copper nail in base of 2½ foot oak tree, scribed "1852 U. S." | 1,851.99 |
| Mouth of Kettle Run, 0.5 mile north of, 650 feet west of road crossing, 10 feet north of track, 10 feet south of wagon road, in bowlder; bronze tablet stamped "1869 B 4 1912" | 1,868.170 |
| Mouth of Kettle Run, 0.7 mile south of, west edge of track; chisel point on bowlder, chiseled "1878 U. S." | 1,877.23 |
| Top of west rail at road crossing near old bridge, painted on crossing "1886 U. S." | 1,885.9 |
| Mouth of Kettle Run, 1.6 miles south of, 40 feet north of track, in center of road; chisel point on bowlder, chiseled "1896 U. S." | 1,895.56 |
| Cassiday, 3.2 miles north of, west edge of track, east edge of river; copper nail in base of 1½ foot gum tree, scribed "1936 U. S." | 1,935.97 |

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| | Feet. |
|---|---|
| Cassiday, 1.4 miles north of, east edge of track, 350 feet north of road crossing, in bowlder; bronze tablet stamped "1991 B 5 1912" | 1,990.930 |
| Cassiday, 300 feet south of boarding house, 300 feet south of lumber company's engine house, 50 feet south of Cassiday Creek, 35 feet southeast of track; copper nail in base of 18-inch spruce tree, scribed "2021 U. S., aluminum tag stamped "2021 U. S." | 2,020.18 |
| Cassiday, 0.8 mile south of, east end of south abutment of wagon bridge over Middle Fork River; chisel point, chiseled "2046 U. S." | 2,045.25 |
| Cassiday, 2.4 miles south of, 40 feet east of track, 0.8 mile north of Stone Cole Run, 250 feet south of farmhouse, 100 feet west of wagon road; in ledge; bronze tablet stamped "2101 B 6 1912" | 2,100.164 |
| Mouth of Stone Cole Run, 150 feet north of, west edge of track, 100 feet south of house; copper nail in base of 3-foot spruce tree, scribed "2119 U. S.", aluminum tag stamped "2119 U. S." | 2,118.28 |
| Mouth of Stone Cole Run, 1 mile south of, west side of river where railroad right of way crosses it; copper nail in base of 2-foot birch tree, scribed; aluminum tag stamped "2158 U. S." | 2,157.90 |
| West Huttonsville, 1.9 miles north of, 600 feet south of mouth of Laurel Creek, 200 feet south of foot bridge, west edge of road, east edge of creek, 600 feet west of farmhouse; chisel point on bowlder, chiseled "2214 U. S." | 2,213.37 |
| West Huttonsville, 1.1 miles north of, west edge of road at forks, 700 feet north of farmhouse; chisel point on bowlder, painted "2264 U. S." | 2,263.41 |

**From Palace Valley along lumber railroad to Alexander.**

| | |
|---|---|
| Palace Valley, 300 feet south of road crossing, 20 feet east of track, in bowlder; bronze tablet stamped "2102 B 10 1912" | 2,101.344 |
| Shahan, top of south rail at road crossing in front of station; painted on platform "2025 U. S." | 2,025.1 |
| Alexander, 3.3 miles east of, south edge of track; chisel point on bowlder, chiseled "2001 U.S." | 2,000.44 |
| Alexander, 2.4 miles east of, north edge of track; chisel point on bowlder, chiseled "1957 U. S." | 1,957.00 |
| Alexander, 1 mile east of, east edge of track at road crossing; chisel point on bowlder, chiseled "1878 U. S." | 1,877.77 |
| Alexander, 20 feet southwest of switch, 100 feet north of post office; bronze tablet stamped "1855" | 1,855.010 |

## Elizabeth and Harrisville quadrangles.

### RITCHIE, WIRT, AND WOOD COUNTIES.

Leveling in Elizabeth quadrangle in 1904 by G. L. Gordon, and in Harrisville quadrangle in 1903 by G. L. Gordon and R. E. McFadden, and in 1904 by George Seidel.

### ELIZABETH QUADRANGLE.

[Latitude 39°–39° 15′; longitude 81° 15′–81° 30′.]

**From Davisville east along Baltimore & Ohio R. R. to Petroleum.**

| | Feet. |
|---|---|
| Davisville, at railroad crossing; top of rail | 610 |
| Davisville, at center of west end of railroad culvert; aluminum tablet stamped "601 Adj 1903" | 601.208 |
| Davisville, 1.7 miles east of, in top of southeast abutment at southwest end of railroad bridge 51 over Stillwell Creek; chiseled square | 607.31 |

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| | Feet. |
|---|---|
| Kanawha station, at crossing; top of rail | 611.3 |
| Kanawha, 0.9 mile southeast of station, northwest end of railroad tunnel, southwest side of track, fifth stone from bottom next opening; aluminum tablet stamped "615 Adj 1903" | 614.876 |
| Kanawha, 2 miles southeast of station, on top of southwest end of southeast abutment of railroad bridge 50; chiseled square | 608.46 |
| Hanna, road crossing; top of rail | 623.1 |
| Hanna, 0.14 mile east of post office, in bridge seat at southwest end of west abutment of railroad bridge 48 over Walker Creek; bronze tablet stamped "623 Adj 1903" | 623.253 |
| Walker, in front of station; top of rail | 629.2 |
| Walker, 2.4 miles east of, in southeast corner of east abutment of railroad bridge 46 over Walker Creek; aluminum tablet stamped "698 Adj 1903" | 697.855 |
| Eaton, in front of station; top of rail | 775.0 |
| Eaton, 0.5 mile east of, north side of track, in face of rock cliff; aluminum tablet stamped "752 Adj 1903" | 751.873 |
| Petroleum, 1 mile west of, on northeast corner stone of railroad bridge 44; chiseled square | 692.911 |
| Petroleum, at road crossing; top of rail | 695.5 |
| Petroleum, near, on south end of west abutment of railroad bridge 41; chiseled square | 697.77 |
| Petroleum, 0.4 mile east of, in top of south side of west abutment to railroad bridge 40; bronze tablet stamped "700 Adj 1903" | 700.050 |

**From Petroleum south along highway to Cisko, thence southwest to Elizabeth.**

| | |
|---|---|
| Petroleum, 2.8 miles south of, 100 feet southeast of summit, northeast side of road, in rocky ledge; aluminum tablet stamped "1084 Adj 1903" | 1,083.888 |
| Cisko, 46 feet southwest of southwest corner of Buffalo M. P. Church; iron post stamped "640 Adj 1903" | 640.155 |
| Cisko, 3.6 miles southwest of, 90 feet east of northeast corner of schoolhouse, in west face of large rock; bronze tablet stamped "702 Adj 1903" | 701.869 |
| Standingstone, 3.5 miles east of, 540 feet southwest of Parish Fork schoolhouse, left side of road, in top of large rock; bronze tablet stamped "736 Adj 1903" | 735.434 |
| Standingstone, 0.8 mile southeast of, 840 feet east of forks of road; on right side of road, in top of large rock; bronze tablet stamped "619 Adj 1903" | 618.833 |

**From Kanawha south along Little Kanawha R. R. to Palestine.**

| | |
|---|---|
| Leachtown, at road crossing; top of rail | 617.2 |
| Leachtown, river side of railroad, in small rock; bronze tablet | 609.541 |
| Slate, at road crossing; top of rail | 608.3 |
| Fishing Camp, in front of station; top of rail | 614.5 |
| Hughes River station, 2.5 miles east of Slate, 15 feet northeast of northeast corner of station; iron post stamped "618 Adj 1903" | 617.592 |
| Newark, in front of station; top of rail | 613.9 |
| Newark, 1.4 miles southeast of, 24 feet west of track; iron post stamped "627 Adj 1903" | 626.979 |
| Standingstone, at road crossing; top of rail | 620.8 |
| Elizabeth, on southwest curb line of Washington Street, point southeast of north corner of Raleigh Hotel, south meridian mark, in stone post; bronze tablet stamped "646 Adj 1903" | 645.807 |
| Palestine (Reedyripple), 150 feet east of post office, 18 feet south of railroad; iron post stamped "645 Adj 1903" | 644.407 |

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**From Palestine south along highway to Rover.**

| | Feet. |
|---|---|
| Rover, 0.8 mile southwest of, 250 feet southeast of stillhouse, left side of road at southeast end of large high rock, in top of large low rock; aluminum tablet stamped "627 Adj 1903" | 626.340 |

**From Elizabeth south along highway to Burning Springs.**

| | |
|---|---|
| Elizabeth, 2.75 miles southeast of, 350 feet southwest of a small run, east side of road, in large rock 9 feet above road; aluminum tablet stamped "700 Adj 1903" | 699.838 |
| Cherry, 0.3 mile north of, Highlog Run, in northeast corner of south abutment of iron bridge; bronze tablet stamped "633 Adj 1903" | 633.174 |

**From Cisko southeast along highway to Oxbow.**

| | |
|---|---|
| Cisko, 2.73 miles southeast of, in northeast corner of southeast abutment of county bridge over Camp Run; aluminum tablet stamped "637 Adj 1903" | 636.985 |

**HARRISVILLE QUADRANGLE.**

[Latitude 39°-39° 15′; longitude 81°-81° 15′.]

**From Oxbow south along highway via Macfarlan to Munday**

| | |
|---|---|
| Oxbow, 0.7 mile northwest of, 200 feet northeast of road crossing of Louthers Run and close to a small stream, right side of road, in shelf of outcrop of rock; bronze tablet stamped "659 Adj 1903" | 658.886 |
| Macfarlan, 150 feet southwest of post office and station, left side of road, in top of large rock; bronze tablet stamped "668 Adj 1903" | 667.765 |
| Macfarlan, road crossing; top of rail | 658.5 |
| Macfarlan, 3 miles southeast of, 155 feet north of hollow, in shelf of outcrop of rock; bronze tablet stamped "757 Adj 1903" | 757.068 |
| Hartley, 0.1 mile south of, at forks of road near a church and a store, in northeast angle, in top of outcrop of rock; aluminum tablet stamped "931 Adj 1903" | 931.022 |
| Hartley, 2.85 miles southwest of, 0.13 mile north of Munday, west side of road, in outcrop of rock 5 feet above road; bronze tablet stamped "742 Adj 1903" | 741.894 |

**From Nobe northwest along Leatherbark Run road to Smithville, thence east to Hazel Green.**

| | |
|---|---|
| Smithville, in southwest corner of stone foundation of house owned by M. A. Ayers; bronze tablet stamped "718 Grafton" | 719.051 |

**From Pennsboro southwest along Pennsboro & Harrisville R. R. to Gooseneck.**

| | |
|---|---|
| Gooseneck, at road crossing; top of rail | 740.8 |
| Gooseneck, 0.1 mile southwest of, at south end of foot bridge over North Fork, Hughes River, in rock cliff; bronze tablet stamped "732 Grafton" | 732.510 |

**From Ellenboro southwest along Baltimore & Ohio R. R. to Cairo, thence northwest along highway to Nutter farm, thence southeast to Petroleum.**

| | |
|---|---|
| Cornwallis, 2.8 miles northeast of, on coping stone of southwest abutment of Baltimore & Ohio R. R. bridge 30; chiseled square | 739.042 |
| Cornwallis, 1.8 miles northeast of, at west end of Baltimore & Ohio R. R. tunnel 11, south side of track, on corner of foundation stone; chiseled square | 708.91 |
| Cornwallis, in front of station; top of rail | 686.4 |

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| | Feet. |
|---|---|
| Cornwallis, 375 feet west of, in bridge seat at north end of east abutment of bridge 32; bronze tablet stamped "681 Grafton 1903" | 681.138 |
| Cairo, 1 mile east of, on south end of east abutment of railway bridge 35 over Bonds Creek; Coast and Geodetic Survey bench mark XXXVI | 685.654 |
| Cairo, in front of freight station; top of low rail | 680 |
| Cairo, in railway bridge 36, in north end of east abutment; bronze tablet stamped "674 Grafton 1903" | 673.700 |
| Nutter farm, a short distance north of A. B. Wilson's store, in bridge seat at north end of west abutment of new county bridge over Goose Creek; bronze tablet stamped "733 Grafton 1903" | 732.889 |
| Petroleum, 3.7 miles northeast of, north side of road, opposite farmhouse of W. H. Cantwell, in ledge of rock between road and creek; bronze tablet stamped "714 Adj 1903" | 713.142 |

**From Cairo southwest along highway to Cisna.**

| | |
|---|---|
| Cairo, 3.9 miles south of, at pumping station, 200 feet south of west end of footbridge, in large rock; aluminum tablet stamped "657 Adj 1903" | 656.920 |
| Rusk, 3.9 miles northwest of, east side of road, between road and small run, 500 feet north of A. R. Phillips's house, in ledge of rocks; bronze tablet stamped "671 Adj 1903" | 670.328 |

**From Cornwallis southeast along highway to Goffs, thence southwest to Smithville.**

| | |
|---|---|
| Harrisville, in west end of doorstep of main entrance of courthouse; aluminum tablet stamped "871 Adj 1903" | 870.288 |
| Washburn, 0.5 mile northeast of new post office, southwest corner of store owned and occupied by D. S. Hall & Bros.; bronze tablet stamped "756 Adj 1903" | 755.847 |
| Goffs post office, west end of north abutment of big iron bridge across South Fork, Hughes River; aluminum tablet stamped "741 Adj 1903" | 713.683 |

## Arnoldsburg, Ripley, and Spencer quadrangles.

### CALHOUN, JACKSON, ROANE, AND WIRT COUNTIES.

Leveling in Arnoldsburg quadrangle in 1903 and 1904 by F. T. Willis, and in 1905 by D. D. Teets; in Ripley quadrangle in 1905 by G. L. Gordon; and in Spencer quadrangle in 1904 and 1905 by G. L. Gordon, and in 1905 by D. D. Teets.

### ARNOLDSBURG QUADRANGLE.

[Latitude 38° 45′–39°; longitude 81°–81° 15′.]

**From Creston east along highway via Grantsville to Whitepine.**

| | Feet. |
|---|---|
| Annamoriah, 0.2 mile north of, in southwest angle of forks of road near spring, in east end of outcrop of rock; bronze tablet stamped "945 Adj 1903" | 944.903 |
| Big Bend (Brooksville), 0.46 mile west of, right side of road, in northwest face of large rock; bronze tablet stamped "673 Adj 1903" | 672.770 |
| Purdy, on west side of county road about 105 feet northeast of post office, in southeast face of large rock; bronze tablet stamped "706 Adj 1903" | 705.640 |
| Grantsville, in northwest corner of west face of stone foundation of courthouse; bronze tablet stamped "725 Grafton" | 726.301 |
| Whitepine, 4.9 miles northeast of Grantsville, 600 feet west of forks of road and 12 feet south of road crossing of small run, in northwest corner of large rock; bronze tablet stamped "787 Adj 1903" | 786.560 |

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**From Stumptown west along highway via Arnoldsburg to Pink, thence north to Creston.**

| | Feet. |
|---|---|
| Stumptown, 2.1 miles southwest of, north side of road, 220 feet southeast of a hollow, in south face of large rock; aluminum tablet stamped "752 Adj 1903" | 753.146 |
| Millstone, 0.5 mile northeast of, in center of corner stone of Sand Ridge Church; bronze tablet stamped "1203 Adj 1903" | 1,203.855 |
| Arnoldsburg, 0.4 mile east of, 125 feet southwest of hollow near junction of road from south, north side of road, in face of outcrop of rock; bronze tablet stamped "733 Adj 1903" | 734.239 |
| Beech, 0.24 mile northeast of post office, 90 feet southwest of mouth of hollow from southeast side of road, in top of large rock; bronze tablet stamped "742 Adj 1903" | 743.206 |
| Pink, 0.87 mile east of, west side of road, in top of large rock; bronze tablet stamped "709 Adj 1903" | 710.265 |
| Tristan, 0.5 mile north of, west side of road, near a poor dwelling, in large rock; bronze tablet stamped "709 Adj 1903" | 710.312 |
| Rocksdale, 0.08 mile west of, north side of West Fork Little Kanawha River, oposite mouth of Henry Fork, north side of road, in southeast end of large rock; bronze tablet stamped "679 Adj 1903" | 680.404 |
| Richardson, 5 feet northeast of northeast corner of W. E. Bee's store; iron post stamped "674 Adj 1903" | 675.832 |

**From Big Bend north along highway via Industry to Munday.**

| | |
|---|---|
| Industry, 1.9 miles west of, 125 feet northwest of ford, on north side of Straight Creek, in face of outcrop of rock; bronze tablet stamped "663 Adj 1903" | 662.899 |

**From Grantsville northeast along highway to Nobe.**

| | |
|---|---|
| Nobe, at northwest corner of Chapel Church, in north foundation wall; bronze tablet stamped "1090 Grafton" | 1,091.229 |

**From Grantsville south along highway to Arnoldsburg.**

| | |
|---|---|
| Sycamore, 3.34 miles north of, on dividing ridge between Philip Run and Sycamore Creek, in center of corner stone of schoolhouse, 150 feet east of road; bronze tablet stamped "1009 Adj 1903" | 1,009.275 |
| Sycamore, 0.2 mile south of, on Sycamore Creek, on east side of road, opposite house to west of road, in stone; bronze tablet stamped "814 Adj 1903" | 814.061 |

## RIPLEY QUADRANGLE.

[Latitude 38° 45′–39°; longitude 81° 30′–81° 45′.]

**From Ravenswood east along Baltimore & Ohio R. R. to Dukes (double-rodded line).**

| | |
|---|---|
| Silverton, 0.5 mile west of (2.5 miles east of Ravenswood), north side of track, in ledge of rock; bronze tablet stamped "579 Adj 1903" | 579.081 |
| Silverton, at road crossing; top of rail | 584.7 |
| Crow Summit, 0.5 mile west of (2.7 miles east of Silverton), east of and near a large hill, 9 feet left of center of track, in top of large stone; bronze tablet stamped "591 Adj 1903" | 590.813 |
| Crow Summit, in front of station; top of rail | 640.7 |
| Sandyville, road crossing; top of rail | 598.6 |



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| | Feet. |
|---|---|
| Sandyville, 1 mile east of, near road crossing, on right of track, in northwest corner of northwest abutment of iron county bridge; bronze tablet stamped "594 Adj 1903" | 593.528 |
| Jones crossing; top of rail | 602.4 |
| Meadowdale, 300 feet northwest of station, near junction of Biglick road with pike, in face of large rock; bronze tablet stamped "626 Adj 1903" | 625.892 |
| Meadowdale, at road crossing; top of rail | 617.0 |
| Leroy, about 300 feet southwest of store and post office and across Sand Creek, in face of outcrop of rock; bronze tablet stamped "646 Adj 1903" | 645.888 |
| Liverpool, 1.6 miles east of, northwest side of county road, about 220 feet northeast of railroad crossing, in outcrop of rock; bronze tablet stamped "873 Adj 1903" | 872.860 |

**From Wiseburg southwest along highway to Sherman.**

| | |
|---|---|
| Cuba, 300 feet north of post office, on west (opposite) side of road, edge of stream, in top of large bowlder; aluminum tablet stamped "673 Grafton 1903" | 672.972 |

**From Evans east along railroad and turnpike to point 0.5 mile east of Marshall.**

| | |
|---|---|
| Ripley, 2.9 miles west of, 70 feet south of track, east side of road, in top of low rock; bronze tablet stamped "602 Adj 1903" | 601.481 |
| Ripley, railroad crossing at station; top of rail | 606 |
| Ripley, courthouse square, southwest corner, in top of stone post; bronze meridian tablet stamped "615 Adj 1903" | 614.426 |
| Hereford, 3.4 miles west of, north of road and near sharp bend to south, in shelf of rock; bronze tablet stamped "824 Adj 1903" | 823.754 |
| Hereford, 0.3 mile east of, north of road, in top of large rock; bronze tablet stamped "632 Adj 1903" | 631.610 |
| Frozencamp, in north end of west abutment of covered bridge over Big Run; bronze tablet stamped "641 Adj 1903" | 640.951 |
| Marshall, 0.5 mile east of, north of road, in face of large rock; bronze tablet stamped "697 Adj 1903" | 696.791 |

**From Ripley north along road to Sandyville.**

| | |
|---|---|
| Ripley, 3.25 miles north of, 0.4 mile south of crossroads and summit, east of road, in top of outcrop of rock; bronze tablet stamped "729 Adj 1903" | 728.455 |
| Mentor, 1.4 miles north of, in second step at northeast side of northwest abutment of covered bridge over Sandy Creek; bronze tablet stamped "591 Adj 1903" | 590.910 |

**From Leroy northeast along road to Peewee.**

| | |
|---|---|
| Leroy, 2.65 miles north of, east of road, near dwelling, in shelf of outcrop of rock; bronze tablet stamped "961 Adj 1903" | 961.000 |

## SPENCER QUADRANGLE.

[Latitude 38° 45′–39°; longitude 81° 15′–81° 30′.]

**From Dukes east along Baltimore & Ohio R. R. to Spencer, thence east along highway to Tristan (double-rodded line).**

| | |
|---|---|
| Dukes, at road crossing; top of rail | 691.6 |
| Dukes, 0.2 mile east of, 55 feet north of track, southwest corner of large rock; bronze tablet stamped "694 Adj 1903" | 694.193 |
| Reedy, in front of station; top of rail | 676.0 |
| Reedy, 1.7 miles southeast of, in west corner of culvert over Spring Branch; bronze tablet stamped "684 Adj 1903" | 683.881 |

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| | Feet. |
|---|---|
| Kyger, in front of station; top of rail | 706.3 |
| Kyger, 700 feet southeast of, in east end of north abutment of county iron bridge over Reedy Creek; bronze tablet stamped "701 Adj 1903" | 701.239 |
| Barrs, at road crossing; top of rail | 898.5 |
| Barrs, about 80 feet west of signboard, on north side of county road, in face of large rock; bronze tablet stamped "917 Adj 1903" | 916.796 |
| Spencer, at crossing at station; top of rail | 719.0 |
| Spencer, 0.16 mile southeast of, near end of railroad, in west abutment of bridge seat of county bridge over Spring Creek; aluminum tablet stamped "726 Adj 1903" | 725.600 |
| Spencer, 3.2 miles east of, 1.1 miles west of Pasco, in top of large rock south of road; aluminum tablet stamped "1071 Adj 1903" | 1,071.154 |
| Pasco, 1.8 miles east of, on right side of road, in northwest corner of large rock; bronze tablet stamped "742 Adj 1903" | 741.833 |
| **From Industry west along highway to Burning Springs, thence southeast to Creston.** | |
| Industry, 4.2 miles west of, in northeast end of southeast abutment on bridge seat of iron bridge over Rock Run; bronze tablet stamped "650 Adj 1903" | 669.794 |
| Industry, 4.6 miles west of, left side of road, in root of chestnut tree 20 inches in diameter; nail (Wabash R. R. bench mark) | 656.56 |
| Burning Springs, 2.8 miles southeast of, 90 feet northwest of a deep hollow, southwest side of road, in top of large rock; bronze tablet stamped "656 Adj 1903" | 655.930 |
| Creston, 0.11 mile east of, north side of road, in outcrop of rock; bronze tablet stamped "701 Adj 1903" | 700.850 |
| **From Creston south along highway toward Richardson.** | |
| Richardson, 4 miles north of, south side of road, south side of West Fork, north angle of very large rock; bronze tablet stamped "657 Adj 1903" | 658.412 |
| **From Peewee northeast along road via Zackville to Rover.** | |
| Peewee, 0.47 mile northeast of, north of road, in face of ledge of rock; bronze tablet stamped "692 Adj 1903" | 691.956 |
| Zackville, 1 mile northeast of, northeast of road, in face of outcrop of rock; bronze tablet stamped "662 Adj 1903" | 661.995 |
| **From Spencer west along turnpike to Marshall.** | |
| Spencer, 3.1 miles west of, 40 feet northwest of center of turnpike, in face of outcrop of rock; bronze tablet stamped "854 Adj 1903" | 853.682 |
| Reedyville, 0.9 mile east of, at center of forks of road; iron post stamped "753 Adj 1903" | 752.553 |
| Peniel, triangle at forks of road, in top of large rock; bronze tablet stamped "739 Adj 1903" | 739.062 |
| **From Burning Springs south along road to Spencer.** | |
| Evelyn, 1 mile north of post office, 85 feet southwest of fork of road to Creston, in rock west of road; bronze tablet stamped "660 Adj 1903" | 659.864 |
| Evelyn, 2.5 miles south of, 0.2 mile south of Spring Creek crossing, in projecting cliff 10 feet west of road; bronze tablet stamped "745 Adj 1903" | 744.461 |
| Millard post office, 1.2 miles south of, north of road at reversed bend northeast of Spring Creek, in large rock; aluminum tablet stamped "696 Adj 1903" | 695.801 |
| Wellington post office, 1 mile southeast of, east of private road at fork, in large rock; bronze tablet stamped "704 Adj 1903" | 704.008 |

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## Kenna, Otter, Walton, and Winfield quadrangles.

### CALHOUN, CLAY, JACKSON, KANAWHA, MASON, PUTNAM, AND ROANE COUNTIES.

Leveling in Winfield quadrangle in 1906 by C. H. Burns, in Walton and Kenna quadrangles in 1906 by C. H. Burns and E. S. Dawson, and in Otter quadrangle in 1906 by E. S. Dawson and D. D. Teets, and in 1908 by E. S. Dawson.

### OTTER QUADRANGLE.

[Latitude 38° 30′–38° 45′; longitude 81°–81° 15′.]

**From Beech southeast along road via Minnora and Big Otter to point 4 miles south of Big Otter, thence west via Newton to Amma.**

| | Feet. |
|---|---|
| Beech, 2.72 miles south of, 30 feet east of Beech Fork, 0.15 mile north of store and dwelling, in large rock; aluminum tablet stamped "766" | 765.369 |
| Minnora post office, 1.9 miles west of, 1,000 feet west of head of Fink Run, 5 feet south of road along stream bed, 700 feet east of house on right of road, at mouth of deep hollow, at foot of hill, in large stone; aluminum tablet stamped "911" | 911.133 |
| Minnora, 1.2 miles south of, 15 feet east of road, 25 feet west of West Fork, Little Kanawha River, in top of large stone; aluminum tablet stamped "795" | 794.123 |
| Minnora, 4.5 miles south of, west of road, 30 feet northeast of house, at sharp bend in road, in pointed rock; aluminum tablet stamped "835" | 834.862 |
| Stinson, 2 miles southeast of, 200 feet northeast of house, south of road at bend to south, on Stinson Creek, in large bowlder; aluminum tablet stamped "921" | 920.195 |
| Nebo, 1.8 miles south of post office, west of road, 100 feet northeast of house, near head of Stinson Lick (emptying into Otter Creek), in rock; aluminum tablet stamped "993" | 992.527 |
| Big Otter, 1.8 miles south of post office, south of road, 400 feet southwest of house, 600 feet west of deep hollow, in outcrop of cliff; aluminum tablet stamped "868" | 867.766 |
| Steer Run, 400 feet northwest of mouth of, north of road up left-hand fork of Rush Run (emptying into Otter Creek), in outcrop of rock; aluminum tablet stamped "950" | 949.451 |
| Newton, 4.4 miles southeast of, north of road, near mouth of Summers Fork, in rock cliff; aluminum tablet stamped "773" | 772.471 |
| Newton, 2.4 miles southeast of, north of road, 890 feet north of Cutoff Run, 150 feet east of Right Fork of Big Sandy Creek, 3 feet above level of road, in sandstone ledge; aluminum tablet stamped "746" | 745.406 |
| Newton, 2.4 miles southwest of, 115 feet northwest of road forks, 150 feet northwest of Big Sandy Creek, opposite mouth of Granny Creek, in rock cliff; aluminum tablet stamped "711" | 710.205 |
| Bloomington, 0.2 mile south of post office, west edge of road, east edge of woods, in hollow, 20 feet west of Big Sandy Creek, in top of rock outcrop; aluminum tablet stamped "692" | 691.574 |

**Benchmark on Lefthand Run.**

| | |
|---|---|
| Lefthand, 1.3 miles south of post office, 1.2 miles north of mouth of Shaver Fork, 300 feet southeast of Lefthand Run, southeast of road, in sandstone; aluminum tablet stamped "760" | 759.819 |

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**From Big Otter southeast to mouth of Dog Run on Buffalo Creek.**

| | Feet. |
|---|---|
| Big Otter, 5 miles south of, 1.2 miles south of mouth of Rush Run, east of road, 250 feet northeast of house, in hollow across Otter Creek, in rock; aluminum tablet stamped "798" | 797.662 |
| Ivydale post office (Otter station), in southwest pier of iron suspension county bridge across Elk River; aluminum tablet stamped "758" | 757.459 |

**From Rand east along Coal & Coke R. R. to King.**[1]

| | |
|---|---|
| Rand, 0.12 mile east of, 0.74 mile west of King, 10 feet south of Coal and Coke R. R. track, inside of wide curve near fill and deep hollow to south, in sandstone outcrop; aluminum tablet stamped "654" | 654.068 |
| King, in front of station; top of rail | 653.6 |

**WALTON QUADRANGLE.**

[Latitude 38° 30′–38° 45′; longitude 81° 15′–81° 30′.]

**From Amma west along road to Kettle.**

| | |
|---|---|
| Amma, 0.25 mile east of post office, west of road, 150 feet northwest of Big Sandy Creek, 100 feet west of bridge over mouth of Lefthand Run, in rock; aluminum tablet stamped "696" | 695.572 |
| Amma, 2.6 miles southwest of (0.2 mile northeast of Roadside schoolhouse), 30 feet west of Garner Branch, opposite blacksmith shop, northwest of road, in outcrop of rock; aluminum tablet stamped "657" | 656.994 |
| Wellford, 160 feet west of post office, on west side of Lefthand Creek at mouth of Lick Branch, southwest of footbridge over Lefthand Creek, west of road, in outcrop; aluminum tablet stamped "625" | 624.427 |
| Wellford, 3.6 miles northwest of 2.2 miles west of mouth of Gabes Creek, south of road, 200 feet north of Gabes Creek and house in hollow, 0.85 mile east of summit, in top of rock bowlder; aluminum tablet stamped "917" | 916.163 |
| Wellford, 4 miles west of, 350 feet northwest of foot of mountain, 25 feet north of Small Run, 0.7 mile east of Trail Branch of Little Sandy Creek, north of road, in outcrop of stone; aluminum tablet stamped "803" | 802.927 |
| Hunt, 3.2 miles northeast of, 150 feet east of hollow and house, 90 feet north of Little Sandy Creek, north edge of road, in bowlder; aluminum tablet stamped "692" | 691.516 |
| Hunt, 125 feet north of post office, in southwest corner of foundation of store, at forks of road and mouth of Pocatalico Fork of Little Sandy Creek, north of road; aluminum tablet stamped "658" | 657.434 |
| Kettle, 300 feet south of post office, west of road, east of Hunt Fork of Green Creek, 420 feet south of Green Creek, in blue sandstone; aluminum tablet stamped "672" | 671.375 |

**From Amma northwest along road to Speed, thence southwest to Harmony.**

| | |
|---|---|
| Lefthand, 1.65 miles northwest of, north of road, 400 feet east of hollow to north, in sandstone outcrop; aluminum tablet stamped "868" | 866.111 |
| Lefthand, 4.5 miles northwest of, south of road, on north bank of Pocatalico River, in sandstone outcrop; aluminum tablet stamped "771" | 769.731 |
| Hammack, 425 feet north of post office, at mouth of Shammon Branch, in sandstone outcrop; aluminum tablet stamped "734" | 732.661 |
| Hammack, 3 miles north of, 100 feet east of Rush Creek, north of road, in sharp bend of road in field, 60 feet north of center of road, in bluestone outcrop; aluminum tablet stamped "751" | 749.238 |

[1] Leveling of 1908 by C. M. Bennett; line closes 1 foot low at Leatherwood and these elevations may therefore be that amount too low.

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| | Feet. |
|---|---|
| Rushville, 1.65 miles northwest of, in field 220 feet south of road, west of large flat hollow and small mill, in sandstone outcrop; aluminum tablet stamped "907" | 905.400 |
| Speed, 420 feet west of road forks at post-office building and mouth of Buffalolick Run (emptying into Spring Creek), south of Spring Creek road, in sandstone outcrop; aluminum tablet stamped "794" | 792.242 |
| Gandeeville, east of post office, on property of R. C. Blasser, 50 feet south of road forks, in sandstone outcrop; aluminum tablet stamped "803" | 801.894 |
| Gandeeville, 3.15 miles west of, south of road opposite road forks, east of house and store, in sandstone outcrop; aluminum tablet stamped "764" | 762.644 |
| Harmony, 1.2 miles north of, 200 feet west of mouth of Wolfcamp Run, at road forks, 60 feet north of road, inside of field on property of T. W. Hughes, in front of house on south side of road, in sandstone outcrop; aluminum tablet stamped "748" | 746.433 |

## KENNA QUADRANGLE.

[Latitude 38° 30′–38° 45′; longitude 81° 30′–81° 45′.]

### From Harmony west along road via Belgrove to Kenna, thence southwest to mouth of Stumpy Run, 4.4 miles west of Liberty.

| | |
|---|---|
| Higby, 1.5 miles southeast of, south of road and bank of Higby Creek, 750 feet above right fork of Higby Creek, in sandstone; aluminum tablet stamped "738" | 737.712 |
| Belgrove, 1 mile southeast of, on north side of road, on bank 70 feet east of private road up deep hollow to north of house and blacksmith shop, in sandstone outcrop; aluminum tablet stamped "704" | 703.267 |
| Belgrove, 2 miles southwest of, 40 feet south of center of road in field, 60 feet north of house, in sandstone outcrop; aluminum tablet stamped "817" | 816.052 |
| Kenna, 1.5 miles east of, north of road, 700 feet west of schoolhouse, 380 feet east of road fork to north, in sandstone outcrop; aluminum tablet stamped "747" | 746.250 |
| Emma, west of road, in corner stone of church; aluminum tablet stamped "980" | 979.354 |
| Liberty, 100 feet from center of road, opposite post office, in stone wall of cellar (property of J. M. Carney) on west side; aluminum tablet stamped "779" | 777.837 |

### From Hunt north to Kettle.

| | |
|---|---|
| Hunt, 3 miles north of, west of Pocatalico Fork, opposite house and west of hollow, 1 mile east of mountain, north of road, in bluestone; aluminum tablet stamped "809" | 808.469 |

### From Kettle west along road to point near Sissonville, thence northwest to Kenna.

| | |
|---|---|
| Island Branch, 0.2 mile east of post office, north of road, 40 feet north of Pocatalico River, 90 feet west of Camp School, in rock; aluminum tablet stamped "656" | 655.697 |
| Island Branch, 3.1 miles southwest of, 50 feet west of Pocatalico River, 0.2 mile north of Emma Bell schoolhouse, east of road, in sandstone outcrop; aluminum tablet stamped "646" | 645.276 |
| Carney, 0.5 mile west of post office, north of road, 150 feet north of Pocatalico River, 0.1 mile west of Victory schoolhouse, in bowlder; aluminum tablet stamped "635" | 634.955 |
| Sissonville, 3 miles north of, in south end of east abutment of iron bridge over Left Fork of Pocatalico River; aluminum tablet stamped "625" | 625.293 |

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| | Feet. |
|---|---|
| Loop, 2.65 miles northwest of, 1 mile southeast of Goldtown, 100 feet west of mouth of Dudden Fork, in east end of north abutment of iron bridge; aluminum tablet stamped "643" | 643.048 |
| Goldtown, 1.5 miles northwest of, east of road, 40 feet from center of road, road forks to north, in sandstone foundation of Watts Chapel; aluminum tablet stamped "671" | 670.371 |
| Kenna, 0.8 mile south of, east of road, 380 feet south of house to west, in sandstone outcrop; aluminum tablet stamped "872" | 871.672 |

**From Sissonville southwest 3.4 miles (single-spur line).**

| | |
|---|---|
| Sissonville, 90 feet south of north end west side of iron bridge over Pocatalico River; aluminum tablet stamped "624" | 623.986 |
| Sissonville, 3.45 miles southwest of, 50 feet west of road, 100 feet west of Pocatalico River, 0.9 mile north of Derrick Creek, in garden of old house, in bowlder; aluminum tablet stamped "615" | 615.145 |

## WINFIELD QUADRANGLE.

[Latitude 38° 30′–38° 45′; longitude 81° 45′–82°.]

**From Leon south along east side of Kanawha River to Woods station, thence across river and west to Albatross.**

| | |
|---|---|
| Arbuckle, 0.1 mile south of, 10 feet east of road, in sandstone; aluminum tablet stamped "608" | 608.310 |
| Arbuckle, 2.3 miles south of, in bridge abutment on northeast corner of bridge over Arbuckle Creek; aluminum tablet stamped "567" | 566.940 |
| Buffalo, in stone door sill in west end of M. E. Church South; aluminum tablet stamped "580" | 579.746 |
| Woods station (3.8 miles south of Buffalo), east of road opposite fork west to Kanawha River ford to Fraziers Bottom, in sandstone; aluminum tablet stamped "590" | 590.190 |

**From Woods station southeast along Kanawha River to Redhouse Shoals, thence northeast along highway to Paradise, thence north to Elmwood, thence west to Grimms Landing.**

| | |
|---|---|
| Redhouse Shoals, in northeast end of county bridge abutment; aluminum tablet stamped "570" | 569.590 |
| Redhouse Shoals, 3.5 miles northeast of, 0.4 mile west of a road summit, 20 feet south of center of road, in sandstone; aluminum tablet stamped "967" | 966.650 |
| Confidence, 0.8 mile east of, 15 feet north of center of road, in sandstone; aluminum tablet stamped "853" | 853.251 |
| Paradise, 2.3 miles north of, east side of road at crossroads, north of Cherry Fork of Eighteenmile Creek, in sandstone; aluminum tablet stamped "660" | 659.772 |
| Paradise, 4.5 miles north of, in abutment of south end of county bridge over Eighteenmile Creek; aluminum tablet stamped "635" | 634.561 |
| Tribble, 2.2 miles southeast of, 15 feet north from center of road, south of house, hollow north and south, in sandstone; aluminum tablet stamped "713" | 713.123 |
| Elmwood, 0.7 mile east of post office, on northeast corner of road forks, in sandstone; aluminum tablet stamped "624" | 625.449 |
| Grimms Landing, 3 miles northeast of, north of road, south of house, in sandstone; aluminum tablet stamped "624" | 625.768 |

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**Cowen, Lobelia, Richwood, Summersville, Webster Springs, and Winona 15′ quadrangles (Nicholas and Huntersville 30′ quadrangles).**

**CLAY, FAYETTE, GREENBRIER, AND WEBSTER COUNTIES.**

The elevations in the following list were determined by primary leveling and accord with the 1912 adjustment of precise leveling.

The list consists partly of old lines of 1898–99 formerly published in the appendix to the Twenty-first Annual Report of the Director and in Bulletin 399 with elevations readjusted on account of additional data and the releveling from Ivydale to Liberty Bowl Schoolhouse and from Summersville via Zela to Fowlers Knob.

The leveling was done in Winona quadrangle in 1898 by Hargraves Wood, in 1912 by L. F. Biggs, and in 1915 by H. S. Senseney; in Lobelia quadrangle in 1899 by Wood; in Richwood and Summersville quadrangles in 1898–99 by Wood and in 1915 by Senseney; in Cowen quadrangle in 1899 by Wood and in 1915 by Senseney; and in Webster Springs quadrangle in 1913 by Karl E. Schlachter and in 1915 by Senseney.

**COWEN QUADRANGLE.**

[Latitude 38° 15′–38° 30′; longitude 84° 30′–84° 45′.]

**From Birch River post office southeast up Birch River to Welch Glade, thence southwest to Craigsville.**

| | Feet. |
|---|---|
| Boggs, near post office, 250 feet east of school, 20 feet north of road, in outcrop of rock; bronze tablet stamped "1555 Knwa" | 1,555.797 |
| Welch Glade, about 1 mile northwest of, 725 feet southeast of road from top of mountain to Cowen and Glade Run, about 500 feet southeast of house and 0.25 mile northwest of church on east side of road, in rock; bronze tablet stamped "2253 Knwa" (reported in 1915 as destroyed) | 2,254.137 |
| Lanes Bottom (near Camden on Gauley), at "The Camden" in west side, in pier to porch; bronze tablet stamped "2062 Knwa" (reported in 1915 as destroyed) | 2,062.872 |
| Craigsville, near east end of, 670 feet east of Cranberry road and hotel, north of road in front of Macon Rose's house; bronze tablet stamped "2288 Knwa" (reported in 1915 as destroyed; drill hole remains) | 2,289.033 |

**From Craigsville along highways up Beaver Creek to Delhi, thence west down Muddlety Creek to Hookersville.**

| | |
|---|---|
| Hookersville, 5 miles east of, 225 feet east of fork of Muddlety, at crossing of Right Hand Fork, north of road west of crossing, in overhanging rock; aluminum tablet stamped "2005 Knwa" | 2,005.563 |

**From Craigsville southeast along highways via Woodbine and Richwood to Manning Knob.**

| | |
|---|---|
| Woodbine, 4.5 miles southeast of, on west side of Greenbrier Road, south of trail running west, in hollow near maple tree, in rock; bronze tablet stamped "2969 Knwa" | 2,970.667 |

**From Erbacon south along Baltimore & Ohio R. R. to Fenwick.**

| | |
|---|---|
| Wainville, in east end of south abutment of bridge over Laurel Creek; bronze tablet (not stamped) | 1,572.543 |
| Wainville, in front of signpost; top of west rail | 1,576.7 |

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| | Feet. |
|---|---|
| Wainville, 0.7 mile south of, east side of track, in telephone pole; spike marked "U. S. B. M. 1632" | 1,632.07 |
| Weese, in front of signpost; top of east rail, marked "U. S. 1721" | 1,721.4 |
| Weese, 0.3 mile south of, northwest corner of road crossing, in signpost; spike marked "U. S. B. M. 1746" | 1,746.08 |
| Arcola, in front of signpost; top of east rail, marked "U. S. B. M. "1856" | 1,856.6 |
| Arcola, 0.2 mile south of, west side of track, in ledge; bronze tablet stamped "1875" | 1,875.274 |
| Arcola, 1.3 miles south of, east side of track, in telephone pole; spike marked "U. S. B. M. 1970" | 1,970.55 |
| Halo (Marcus post office), in front of signpost; top of west rail, marked "U. S. 2080" | 2,080.4 |
| Halo; 300 feet south of station, northeast corner of road crossing, in ledge; bronze tablet stamped "2085" | 2,085.554 |
| Halo, 1.5 miles south of, east side of track, in telephone pole; spike marked "U. S. B. M. 2214" | 2,215.14 |
| Cowen, in front of station; top of east rail | 2,244.4 |
| Cowen, in west end of first step to entrance of First Baptist Church; bronze tablet stamped "2253" | 2,254.144 |
| Cowen, 1 mile south of, northwest corner of road crossing, in signpost; spike marked "U. S. B. M. 2222" | 2,223.16 |
| Cowen, 2.1 miles south of, east side of track, in telephone pole; spike marked "U. S. B. M. 2211" | 2,212.11 |
| Cowen, 3.2 miles south of, in east end of south abutment of bridge over Big Ditch Run; bronze tablet stamped "2202" | 2,202.493 |
| Cowen, 4.4 miles south of, east side of track, in telephone pole; spike marked "U. S. B. M. 2131" | 2132.09 |
| Cowen, 5.6 miles south of, east side of track, in telephone pole; spike marked "U. S. B. M. 2063" | 2,063.30 |
| Cowen, 6.9 miles south of, west side of track, in ledge; bronze tablet stamped "2039" | 2,039.671 |
| Gauley Mills, in front of platform; top of east rail, marked "U. S. 2035" | 2,035.7 |
| Gauley Mills, 0.5 mile northwest of, on east end of north abutment of wagon bridge over Gauley River; chiseled square, marked "U. S. B. M. 2029" | 2,030.09 |
| Camden on Gauley, east side of water tank, at foot of ladder, in concrete block; bronze tablet stamped "2025" | 2,025.748 |
| Camden on Gauley, in front of station; top of east rail | 2,034.0 |
| Allingdale, in front of station; top of west rail | 2,022.7 |
| Allingdale, east end of south abutment of bridge "104 A"; chiseled square, marked "U. S. B. M. 2021" | 2,021.83 |
| Allingdale, 1 mile south of, west side of track, in telephone pole; spike marked "U. S. B. M. 2022" | 2,022.36 |
| Allingdale, 2.5 miles south of, east side of track, in ledge; bronze tablet stamped "2018" | 2,018.595 |
| Allingdale, 3.6 miles south of, 60 feet north of north portal of tunnel, west side of track, in telephone pole; spike marked "U. S. B. M. 2008" | 2,008.19 |
| Allingdale, 4.6 miles south of, west side of track, in telephone pole; spike marked "U. S. B. M. 1978" | 1,979.08 |
| Cranberry, in front of station; top of west rail | 1,937.93 |
| Cranberry, in west end of south abutment of bridge over Cranberry River; bronze tablet stamped "1936" | 1,936.806 |
| Cranberry, 1.1 miles south of, east side of track, on ledge; chiseled square, marked "U. S. B. M. 1919" | 1,919.36 |

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| | Feet. |
|---|---|
| Curtin, in front of station; top of south rail | 1,910.0 |
| Curtin, 285 feet east of station, 10 feet west of switch signal, south side of track, in ledge; bronze tablet stamped "1913" | 1,913.501 |
| Cole's siding, in front of platform; top of west rail | 1,940.8 |
| Cole's siding, 45 feet south of south end of platform, west side of track, in telephone pole; spike marked "U. S. B. M. 1940" | 1,940.51 |
| Cole's siding, 1.2 miles south of, west side of track, in telephone pole; spike marked "U. S. B. M. 1987" | 1,987.56 |
| Holcomb, in front of platform; top of west rail | 2,026.0 |
| Holcomb, in east end of north abutment of bridge over Morris Creek; bronze tablet stamped "2025" | 2,025.235 |

**From Cowen east along highway 2.3 miles.**

| | |
|---|---|
| Cowen, 1.1 miles east of, 50 feet west of road forks, north side of road, in root of stump; copper nail with washer stamped "U. S. G. S. W. Va. B. M." | 2,322.54 |
| Cowen, 2.3 miles east of, south side of road, opposite concrete watering trough, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." marked "U. S. B. M. 2271" | 2,271.64 |
| Cowen, 3.5 miles east of, south side of road, in stump; copper nail with washer stamped "U. S. G. S. W. Va. B. M." marked "U. S. B. M. 2210" | 2,210.39 |
| Dyer post office, 2.6 miles west of, 15 feet west of road forks, north side of road, on ledge; chiseled square marked "U. S. B. M. 2194" | 2,194.99 |

**From Richwood northeast 3.6 miles along log railroad (leveled twice).**

| | |
|---|---|
| Richwood, 2.6 miles north of, east side of track, in bowlder; bronze tablet stamped "2350" | 2,350.491 |
| Richwood, 3.6 miles northeast of, north side of track, in telephone pole; spike marked "U. S. B. M. 2453" | 2,454.04 |

**From Craigsville southwest along highway to Summersville (1 foot error in this line).**

| | |
|---|---|
| Beaver, floor of bridge over Beaver Creek | 2,110.5<br>2,111.5 |
| Beaver Creek, surface of water June 21, 1899 | 2,102<br>2,103 |
| Beaver, 2.7 miles southwest of, at the Hicks House, on stone step to stile, marked "2267" on woodwork | 2,268.15<br>2,269.15 |
| Beaver, 3.7 miles southwest of, 1 mile west of Hicks House, about 800 feet northeast of Horse Run, 300 feet west of house in hollow, at edge of timber, north side of road, in rock; bronze tablet stamped "2140 Knwa" (reported destroyed, 1915) | 2,140.287<br>2,141.287 |

## LOBELIA QUADRANGLE.

[Latitude 38°–38° 15′; longitude 80° 15′–80° 30′.]

**From Manning Knob along highways south to Grassy Knob, thence west to Duo.**

| | |
|---|---|
| Richwood, 7.75 miles southeast of, about 2,350 feet southeast of Manning Knob, northeast side of road, 240 feet from foot of descent from Manning Knob going southeast, in large rock; aluminum bolt stamped "3709 Knwa" | 3,710.922 |
| Richwood, about 13.75 miles southeast of, southwest of Greenbrier road, 795 feet northwest of road to Duo, in rock; aluminum tablet stamped "4116 Knwa" | 4,118.617 |

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**Along log railroad.**

| | Feet. |
|---|---|
| Richwood, 4.9 miles northeast of, north side of track, in telephone pole; spike marked "U. S. B. M. 2526" | 2,527.30 |
| Richwood, 6.1 miles northeast of, north side of track, in bowlder; bronze tablet stamped "2624" | 2,624.655 |
| Richwood, 7.3 miles northeast of, south side of track, in stump; copper nail with washer stamped "U. S. G. S. W. Va. B. M." marked "U. S. B. M. 2720" | 2,721.37 |
| North Bend, 300 feet west of schoolhouse, south side of track to Dogway, in large bowlder; bronze tablet stamped "2786" | 2,787.491 |
| North Bend, 1 mile east of, north side of track, on ledge; chiseled square marked "U. S. B. M. 2947" | 2,948.55 |
| North Bend, first switchback from, in front of switch signal; top of rail marked "U. S. 3103" | 3,104.2 |
| North Bend, 2.3 miles east of, west side of track, on bowlder; chiseled square marked "U. S. B. M. 3197" | 3,198.70 |
| North Bend, 3.4 miles east of, south side of track, in ledge; bronze tablet stamped "3421" | 3,423.007 |

## RICHWOOD QUADRANGLE.

[Latitude 38°-38° 15′; longitude 84° 30′-84° 45′.]

**From Riverside along highways east via Burdett schoolhouse to McClungs, thence north to Snow Hill.**

| | |
|---|---|
| Snow Hill, 8.8 miles southeast of, at northwest intersection of Nicholas road and road to Nutterville, 500 feet north of Grig McClungs's house, in sandstone rock; bronze tablet stamped "3392 Knwa" | 3,393.556 |
| Snow Hill, 6.5 miles southeast of, at angle of Greenbrier-Nicholas county line; top of corner stone | 3,130.57 |

**From point 1.6 miles northwest of Snow Hill northeast to Ophelia, thence southeast to Beach Knob, thence southwest to McClungs.**

| | |
|---|---|
| Ophelia, 0.75 mile south of, 1,500 feet west of crossroads and church, west of farm road, 50 feet north of Summersville road, in rock; copper bolt stamped "2587 Knwa" | 2,588.574 |
| Lile, opposite post office, west of road, 100 feet west of McMillion Creek, in rock; copper bolt stamped "3121 Knwa" | 3,123.138 |
| Grassy Knob, at trail fork, 10 feet north of sign, in large flat rock; aluminum bolt stamped "3581 Knwa" | 3,588.018 |

**From Leivasy northeast along road up and crossing Grassy Creek.**

| | |
|---|---|
| Grassy Creek, about 900 feet east of creek crossing, on north side of road up Grassy Creek, in rock; aluminum tablet stamped "2426 Knwa" | 2,427.284 |

**From Beech Knob south to Duo.**

| | |
|---|---|
| Duo, 0.5 mile northwest of, 200 feet north of forks of road to Rupert, 100 feet north of branch, 50 feet east of road, near small house; in bowlder; copper bolt stamped "3206 Knwa" | 3,208.302 |

**Near Richwood.**

| | |
|---|---|
| Richwood, 1.75 miles south of, at Greenbrier-Nicholas county line; top of stone | 2,875.39 |

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**From Fenwick southeast along Baltimore & Ohio R. R. to Richwood (leveled twice).**

| | Feet. |
|---|---|
| Fenwick, in front of station; top of west rail, marked "U. S. 2104" | 2,104.7 |
| Fenwick, in north end of east abutment of bridge over Cherry River; bronze tablet stamped "2103" | 2,104.052 |
| Dain, in front of platform; top of south rail | 2,168.1 |
| Dain, 0.5 mile east of, north side of track, on ledge; chiseled square, marked "U. S. B. M. 2176" | 2,176.37 |
| Richwood, in front of station; top of south rail | 2,193.17 |
| Richwood, 50 feet north of station, in outcrop; bronze tablet stamped "2193" | 2,194.121 |
| Richwood, at northeast corner of fence of John Carter's house, in telephone pole; spike marked "U. S. B. M. 2228" | 2,228.46 |

**From Fenwick southwest along highway to Lile.**

| | |
|---|---|
| Fenwick, 1.3 miles south of, east side of track, in stump; copper nail with washer stamped "U. S. G. S. W. Va. B. M." marked "U. S. B. M. 2189" | 2,189.52 |
| Saxman, on east end of north abutment of bridge over Laurel Creek; chiseled square marked "U. S. B. M. 2264" | 2,264.38 |
| Saxman, 1.6 miles south of, east side of track, in ledge; bronze tablet stamped "2409" | 2,409.555 |
| Saxman, 2.9 miles south of, west side of track, on ledge; chiseled square marked "U. S. B. M. 2483" | 2,483.86 |
| Saxman, 4.4 miles south of, 260 feet south of log road, east side of road up McMillion Creek, in bowlder; bronze tablet stamped "2528" | 2,529.493 |
| Lile, 2 miles northwest of, north side of road, on bowlder; chiseled square marked "U. S. B. M. 2882" | 2,885.10 |
| Lile, 0.8 mile northwest of, 75 feet west of Fallbrook schoolhouse, north side of road, on ledge; chiseled square marked "U. S. B. M. 3057" | 3,058.43 |
| Lile, opposite post office, west of road, 100 feet west of McMillion Creek, in rock; copper bolt stamped "3121 Knwa" | 3,123.138 |

**Near Holcomb.**

| | |
|---|---|
| Holcomb, 1.3 miles south of, east side of track, on bowlder; chiseled square, marked "U. S. B. M. 2067" | 2,068.14 |

## SUMMERSVILLE QUADRANGLE.

[Latitude 38° 15′–38° 30′; longitude 84° 45′–85°.]

**From point near Tipton north along highway to point near Drennen.**

| | |
|---|---|
| Tipton, 0.46 mile southeast of, 90 feet west of short turn to right (going down Laurel Fork of Peters Creek), 400 feet northeast of house on left side of rock, on north side of road, in south stone outcrop; chiseled point marked "1332" | 1,331.14 |

**From Drennen east along highway to Summersville (leveled twice).**

| | |
|---|---|
| Zela, 0.1 mile east of, 300 feet west of Crosslanes road, in field 50 feet south, in large sandstone rock; aluminum tablet stamped "1267 Knwa" | 1,267.990 |
| Gilboa post office, 60 feet east of, north side of road, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." | 1,289.94 |
| Enon post office, 1.1 miles west of, 200 feet west of Wm. Graves's residence, south side of road on ledge; chiseled square | 1,487.96 |
| Enon post office, 150 feet west of, north side of road, in ledge; bronze tablet stamped "1512" | 1,512.199 |

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| | Feet. |
|---|---|
| Summersville, 2.5 miles northwest of, north side of road, on ledge; chiseled square | 1,569.18 |
| Summersville, 1.3 miles northwest of, north side of road, on outcrop; chiseled square | 1,759.01 |
| Summersville, east side of door in base of pilaster in front of courthouse; aluminum tablet stamped "1894 Knwa" | 1,894.382 |

**From Zela south along highway to point near Keslers Crossiones (leveled twice).**

| | |
|---|---|
| Zela, 1.3 miles southeast of, 110 feet south of road forks, east side of road, opposite Whitewater Church, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." | 1,350.72 |
| Zela, 2.6 miles south of, west side of road, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." | 1,522.08 |

**From Summersville northeast along highway to Birch River.**

| | |
|---|---|
| Hookersville, 200 feet west of road to Powell Mountain, at intersection of road up Muddlety Creek, in field, in rock; aluminum tablet stamped "1859 Knwa" | 1,860.133 |
| Birch River, 4.2 miles southwest of Powell Mountain, opposite road to Strange Creek, in small ledge of rock; aluminum bolt stamped "2249 Knwa" | 2,249.973 |
| Birch River, about 300 feet north of post office, east of Powell Creek, about 0.25 mile north of mouth of Powell Creek, opposite Ivan Bros. & Brown's store, in outcrop of rock; aluminum tablet stamped "1108 Knwa" | 1,108.565 |

**From Muddlety northwest along road to Buffalo Creek, thence north to Low Gap (leveled twice).**

| | |
|---|---|
| Muddlety, 7.3 miles northwest of, at crossing, about 2,000 feet north of Beech Fork, south of road, opposite Liberty Bowl Schoolhouse, in rock; aluminum tablet stamped "1747 Knwa" | 1,747.365 |
| Liberty Bowl Schoolhouse, 1.3 miles northwest of, west side of road, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." | 1,774.01 |
| Liberty Bowl Schoolhouse, 3.1 miles northwest of, 300 feet east of Ed. Hamrick's store, north side of road, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." | 1,700.54 |
| Cressmont, 3.4 miles southeast of, north side of road, on ledge; chiseled square | 1,376.05 |
| Cressmont, 2.3 miles southeast of, about 0.34 mile south of Blankenship's store, west side of road, in large bowlder; bronze tablet (not stamped) | 1,062.537 |
| Cressmont, 1.2 miles southeast of, east side of road, in root of stump; copper nail with washer stamped "U. S. G. S. W. Va. B. M." | 923.30 |
| Cressmont, about 250 feet south of railroad crossing, west side of road, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." | 822.90 |
| Enoch, 3.8 miles northwest of, northwest side of Buffalo Creek, opposite point 60 feet north of mouth of Dog Run, in rock cliff; edge of hole in rock. | 826.644 |
| Enoch, 3.8 miles northwest of, northwest side of Buffalo Creek, 90 feet north of Dog Run, in bowlder; aluminum tablet stamped "828" (reported destroyed 1913) | 827.104 |
| Ivydale post office, 9.1 miles southeast of, 1.1 miles northwest of mouth of Dog Run, west of sawmill, northeast of road, in top of large bowlder; aluminum tablet stamped "857" | 856.314 |
| Ivydale, 7.7 miles southeast of, east side of road, on ledge; chiseled square. | 1,070.61 |

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| | Feet. |
|---|---|
| ville, 2.5 miles northwest of, north side of road, on ledge; chiseled ..... | 1,569.18 |
| ville, 1.3 miles northwest of, north side of road, on outcrop; square..... | 1,759.01 |
| ville, east side of door in base of pilaster in front of courthouse; um tablet stamped "1894 Knwa"..... | 1,894.382 |

south along highway to point near Keslers Crossianes (leveled twice).

| | |
|---|---|
| miles southeast of, 110 feet south of road forks, east side of road, e Whitewater Church, in root of tree; copper nail with washer d "U. S. G. S. W. Va. B. M."..... | 1,350.72 |
| miles south of, west side of road, in root of tree; copper nail with stamped "U. S. G. S. W. Va. B. M."..... | 1,522.08 |

From Summersville northeast along highway to Birch River.

| | |
|---|---|
| ville, 200 feet west of road to Powell Mountain, at intersection of p Muddlety Creek, in field, in rock; aluminum tablet stamped Knwa"..... | 1,860.133 |
| iver, 4.2 miles southwest of Powell Mountain, opposite road to e Creek, in small ledge of rock; aluminum bolt stamped "2249 "..... | 2,249.973 |
| iver, about 300 feet north of post office, east of Powell Creek, about ile north of mouth of Powell Creek, opposite Ivan Bros. & Brown's in outcrop of rock; aluminum tablet stamped "1108 Knwa"..... | 1,108.565 |

ddlety northwest along road to Buffalo Creek, thence north to Low Gap (leveled twice).

| | |
|---|---|
| ty, 7.3 miles northwest of, at crossing, about 2,000 feet north of h Fork, south of road, opposite Liberty Bowl Schoolhouse, in rock; inum tablet stamped "1747 Knwa"..... | 1,747.365 |
| y Bowl Schoolhouse, 1.3 miles northwest of, west side of road, in of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." | 1,774.01 |
| y Bowl Schoolhouse, 3.1 miles northwest of, 300 feet east of Ed. rick's store, north side of road, in root of tree; copper nail with her stamped "U. S. G. S. W. Va. B. M."..... | 1,700.54 |
| mont, 3.4 miles southeast of, north side of road, on ledge; chiseled are..... | 1,376.05 |
| mont, 2.3 miles southeast of, about 0.34 mile south of Blankenship's e, west side of road, in large bowlder; bronze tablet (not stamped)... | 1,062.537 |
| mont, 1.2 miles southeast of, east side of road, in root of stump; copper l with washer stamped "U. S. G. S. W. Va. B. M."..... | 923.30 |
| mont, about 250 feet south of railroad crossing, west side of road, in t of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." | 822.90 |
| h, 3.8 miles northwest of, northwest side of Buffalo Creek, opposite int 60 feet north of mouth of Dog Run, in rock cliff; edge of hole in rock. | 826.644 |
| h, 3.8 miles northwest of, northwest side of Buffalo Creek, 90 feet north Dog Run, in bowlder; aluminum tablet stamped "828" (reported stroyed 1913)..... | 827.104 |
| ale post office, 9.1 miles southeast of, 1.1 miles northwest of mouth Dog Run, west of sawmill, northeast of road, in top of large bowlder; minum tablet stamped "857"..... | 856.314 |
| ale, 7.7 miles southeast of, east side of road, on ledge; chiseled square. | 1,070.61 |

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| | Feet. |
|---|---|
| Ivydale, 6.5 miles southeast of, west side of road, from Ivydale to Cressmont, 80 feet north of forks of road to Clay, in ledge; bronze tablet stamped "1352" | 1,352.190 |
| Ivydale, 5.8 miles southeast of, north of road from Sutton to Clay, on northeast slope of hill, south of Low Gap, in rock outcrop; aluminum tablet stamped 1236 (reported in 1915 as "Removed," but hole probably remains) | 1,234.610 |
| Ivydale, 5.6 miles southeast of, west side of road, on ledge; chiseled square | 1,258.21 |

**From Summersville east along highway toward Craigsville (1 foot error in this line).**

| | |
|---|---|
| Haymond, about 1.5 miles east of, about 0.5 mile west of Persinger's run, at road northeast to Persinger, at southeast angle of road fork, on rock; cut point marked "2025" | 2,025.86<br>2,026.86 |

## WEBSTER SPRINGS QUADRANGLE.

[Latitude 38° 15′–38° 30′; longitude 84° 15′–84° 30′.]

**From Skidmore Crossing east along highway to point 1.5 miles northeast of Bergoo.**

| | |
|---|---|
| Skidmore Crossing, 400 feet east of, in bowlder 10 feet north of track; bronze tablet stamped "1530" | 1,530.116 |
| Webster Springs, at north entrance of courthouse, in east side of top step; bronze tablet stamped "1509" | 1,508.740 |
| Webster Springs, 1 mile southeast of, up Elk River road, in rock north end of footbridge over Elk River; chiseled square painted "1492.6" | 1,492.41 |
| Webster Springs, 2½ miles southeast of, 100 feet west of house of W. T. McCray, in bowlder, south edge of road; chiseled square painted "1856" | 1,855.60 |
| Webster Springs, 3.6 miles southeast of, 0.7 mile south of church at Ralph, in rock north edge of road up Elk River; bronze tablet stamped "1988" | 1,987.260 |
| Ralph, 1 mile east of, up Elk River road, in rock south margin of road, west of run; chiseled square painted "1937.4" | 1,937.07 |
| St. Mary's School, 120 feet east of, 10 feet south of road center, in rock; bronze tablet stamped "1856" | 1,856.082 |
| Bernardstown, near mill, at road fork, in rock west side of mill stream; chiseled square painted "1709.4" | 1,709.09 |
| Bergoo post office, 0.4 mile west of, in rock west margin of road; bronze tablet stamped "1840" | 1,840.031 |
| Bergoo post office, at confluence of Elk River and Leatherwood Creek, at south side of ford, in rock; chiseled square painted "1812.1" | 1,811.71 |
| Bergoo, 1.5 miles east of, up Elk River, at road fork, in rock; chiseled square painted "1974.8" | 1,974.32 |

**From Upper Glade northeast along highway to Webster Springs.**

| | |
|---|---|
| Upper Glade post office, in concrete walk to residence of H. F. Given; bronze tablet stamped "2426" | 2,427.202 |
| Upper Glade post office, 1 mile east of, 660 feet south of road forks, east side of road, in stump; copper nail with washer stamped "U. S. G. S. W. VA. B. M." marked "U. S. B. M. 2663" | 2,664.09 |
| Upper Glade post office, 2.2 miles east of, north side of road, on outcrop; chiseled square marked "U. S. B. M. 2712" | 2,712.83 |
| Upper Glade post office, 2.9 miles east of, 80 feet west of narrow-gage railroad crossing, east side of road, in outcrop, bronze tablet stamped "2461" | 2,461.447 |
| Upper Glade post office, 3.9 miles east of, 300 feet north of narrow-gage railroad crossing, east side of road, on outcrop; chiseled square marked "U. S. B. M. 2654" | 2,655.21 |

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| | Feet. |
|---|---|
| Bolair post office, 75 feet east of, south side of road, in large bowlder; bronze tablet stamped "2285" | 2,285.932 |
| Bolair, 1.1 miles north of west side of road, on ledge; chiseled square marked "U. S. B. M. 2433" | 2,433.76 |
| Bolair, 2.1 miles north of, 6 feet south of Kingfisher Creek, on ledge; chiseled square marked "U. S. B. M. 2373" | 2,373.91 |
| Bolair, 3.3 miles north of, 150 feet north of gate, west side of road, in ledge; bronze tablet stamped "2288" | 2,288.901 |
| Webster Springs, at north entrance of courthouse, in east side of top step; bronze tablet stamped "1509" | 1,508.740 |

**From Bolair east 10 miles along highways up Gauley River (leveled twice).**

| | |
|---|---|
| Bolair, 1.2 miles east of, north side of road, on outcrop; chiseled square marked "U. S. B. M. 2270" | 2,270.55 |
| Beaver Run schoolhouse, 240 feet west of, 50 feet north of road, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." marked "U. S. B. M. 2270" | 2,270.82 |
| Beaver Run schoolhouse, 1.5 miles east of, north side of road, in bowlder; bronze tablet stamped "2303" | 2,304.135 |
| Beaver Run schoolhouse, 2.6 miles east of, north side of road, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." marked "U. S. B. M. 2332" | 2,332.42 |
| Beaver Run schoolhouse, 3.9 miles east of, south side of road, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." marked "U. S. B. M. 2335" | 2,335.27 |
| Beaver Run schoolhouse, 4.9 miles east of, about 0.5 mile east of Turkey Creek, north side of road in bowlder; bronze tablet stamped "2343" | 2,343.983 |
| Beaver Run schoolhouse, 5.9 miles east of, on north bank of river, opposite Bernard Bauffman's house, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." marked "U. S. B. M. 2365" | 2,365.92 |
| Beaver Run schoolhouse, 7.1 miles east of, 90 feet east of old dam, north side of trail, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." marked "U. S. B. M. 2412" | 2,412.40 |
| Beaver Run schoolhouse, 7.3 miles east of, 500 feet east of M. N. Barbe's house, 6 feet south of river, in ledge; bronze tablet stamped "2415" | 2,415.880 |
| Beaver Run schoolhouse, 8.9 miles east of, north side of trail opposite Big Run, in root of tree; copper nail with washer marked "U. S. B. M. 2501" (on single spur) | 2,502.19 |

**From Upper Glade southeast 12 miles along highway up Williams Creek.**

| | |
|---|---|
| Dyer post office, 1.4 miles west of, about 420 feet east of Mills Mountains schoolhouse, west side of road, in bowlder; bronze tablet stamped "2216" | 2,216.382 |
| Dyer post office, 120 feet east of, north side of road, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." marked "U. S. B. M. 2223" | 2,223.91 |
| Dyer post office, 1.1 miles east of, north side of road, opposite house of B. F. Dunlap, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." marked "U. S. B. M. 2240" | 2,241.08 |
| Dyer post office, 2.6 miles east of, south side of road, in ledge; bronze tablet stamped "2264" | 2,264.474 |
| Dyer post office, 3.7 miles east of, south side of road, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." marked "U. S. B. M. 2311" | 2,311.57 |

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| | Feet. |
|---|---|
| Dyer post office, 4.8 miles east of, north side of road, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." marked "U. S. B. M. 2304" | 2,305.10 |
| Dyer post office, 6.4 miles east of, about 600 feet northwest of house of Jacob Mullens, about 150 feet north of apple tree, north side of fence, in ledge; bronze tablet stamped "2353" | 2,354.006 |
| Dyer post office, 7.6 miles east of, about 1 mile above Jacob Mullen's house, where trail crosses creek, on bowlder; chiseled square marked "U. S. B. M. 2384" (on single spur line) | 2,384.88 |

**From point 2.6 miles north of Richwood east 20 miles along log railroad (leveled twice).**

| | |
|---|---|
| North Bend, 4.6 miles east of, about 240 feet south of summit, east side of track, on ledge; chiseled square marked "U. S. B. M. 3631" | 3,632.95 |
| North Bend, 5.9 miles east of, 150 feet north of switch, east side of track, in stump; copper nail with washer stamped "U. S. G. S. W. Va. B. M." marked "U. S. B. M. 3462" | 3,463.59 |
| North Bend, 7 miles east of, west side of track, in ledge; bronze tablet stamped "3329" | 3,330.810 |
| North Bend, 8.1 miles east of, south side of track, in stump; copper nail with washer stamped "U. S. G. S. W. Va. B. M." marked "U. S. B. M. 3211" | 3,212.22 |
| Dogway, 30 feet west of water tank, south side of track, in root of stump; copper nail with washer stamped "U. S. G. S. W. Va. B. M." marked "U. S. B. M. 3099" | 3,100.85 |
| Dogway, 1.6 miles northwest of, 150 feet southwest of switch, in ledge; bronze tablet stamped "2911" | 2,912.787 |
| Dogway, 1.1 miles east of mouth of, north side of track, in root of stump; copper nail with washer stamped "U. S. G. S. W. Va. B. M." marked "U. S. B. M. 2974" | 2,975.16 |
| Dogway, 2.1 miles east of mouth of, east side of track, west side of river, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. "B. M. marked "U. S. B. M. 3030" | 3,031.30 |
| Dogway, 3.3 miles east of mouth of, 20 feet south of track, in large bowlder; bronze tablet stamped "3090" | 3,091.213 |

## WINONA QUADRANGLE.

[Latitude 38°–38° 15′; longitude 84° 45′–85°.]

**From Keslers Crosslanes along highways south to Carnefix, thence east to Fowler Knob (leveled twice).**

| | |
|---|---|
| Keslers Crosslanes, 600 feet south of store and crossroads, 100 feet south of S. P. Campbell's house, west of road, in ledge; brass bolt stamped "1567 Knwa" | 1,567.998 |
| Keslers Crosslanes, 1.4 miles south of, west side of road, in root of tree, copper nail with washer stamped "U. S. G. S. W. Va. B. M." | 1,657.26 |
| Keslers Crosslanes, 2.6 miles south of, west side of road, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." | 1,706.40 |
| Carnefix, north side of Gauley River, 35 feet north of ferry landing, east side of road, in large ledge; bronze tablet stamped "1190" | 1,190.647 |
| Carnefix, 1.6 miles southeast of, east side of road, on ledge; chiseled square. | 1,813.73 |
| Mount Lookout post office, 90 feet east of, north side of road, in root of tree, copper nail with washer stamped "U. S. G. S. W. Va. B. M." | 1,981.20 |
| Mount Lookout, 1 mile southeast of, 250 feet south of schoolhouse, east side of road, in ledge of rock; aluminum bolt stamped "2069 Knwa" | 2,070.448 |

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| | Feet. |
|---|---|
| Pool post office, 400 feet north of, east side of road, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M." | 2,146.47 |
| Pool post office, 1.6 miles east of, south side of road, on ledge; chiseled square. | 2,234.14 |
| Pool post office, 3.4 miles east of, at forks of road, in telephone pole; spike. | 2,354.51 |
| Fowler Knob, 400 feet south of, east of road, just north of small branch, in large ledge of rock; aluminum bolt stamped "2195 Knwa" | 2,196.487 |

**From Fowler Knob along highways southwest to Russellville, thence southeast to Riverside (Meadow River).**

| | |
|---|---|
| Miller's ferry (over Meadow River), 0.1 mile north of, east of river, west of road, in ledge of rock; aluminum bolt stamped "1905 Knwa" | 1,905.917 |
| Russellville, 90 feet north of, east of road, west of river, in ledge of rock; aluminum tablet stamped "1900 Knwa" | 1,901.102 |
| Riverside (at Meadow River), 150 feet northwest of, 800 feet east of ford, west of road, between house and barn, in one of several ledges of rock; aluminum bolt stamped "2324 Knwa" | 2,325.219 |

**From Snow Hill west along highway to Fowler Knob.**

| | |
|---|---|
| Snow Hill, 200 feet southwest of post office, 535 feet north of road running west, west of Nicholas road, in rock; aluminum bolt stamped "2943 Knwa" | 2,945.090 |

**From Vinton north along highway to point near Tipton.**

| | |
|---|---|
| Vinton, 250 feet south of, 100 feet south of hollow, on west or upper side of road, 5 feet above grade, on sandstone ledge; chiseled square marked "1377" | 1,376.23 |
| Tipton, 1.5 miles south of, 250 feet north of south foot of Panther Mountain (branch crossing), 30 feet east of road on upper side; on root of hard-maple tree; square cut with nail marked "1430" | 1,429.74 |

**Near Riverside.**

| | |
|---|---|
| Clifftop, 0.5 mile west of, 100 feet east of switch, 15 feet north of track; nail in root of 1½-foot spruce tree, scribed "2291 U. S." | 2,291.17 |
| Camp No. 1, 0.3 mile south of, west edge of track; chisel point on large bowlder; chiseled "2374 U. S." | 2,373.87 |
| Riverside, 0.2 mile south of, west edge of track; chisel point on bowlder, chiseled "2351 U. S." | 2,351.38 |
| Riverside (at Meadow River), 150 feet northwest of, 800 feet east of ford, west of road between house and barn, in one of several ledges of rock; aluminum bolt stamped "2324 Knwa" | 2,325.219 |

## Big Bend and Meadow Creek quadrangles.

### FAYETTE AND SUMMERS COUNTIES.

The leveling was done in 1912 by L. F. Biggs, using yard rod with double-yard check.

### BIG BEND QUADRANGLE.

[Latitude 37° 30′–38°; longitude 80° 45′–81°.]

**From point 2.9 miles south of Warford northeast along road to Talcott.**

| | Feet. |
|---|---|
| Warford, 2.9 miles south of, in stone chimny of J. H. Dickinson's house; aluminum tablet stamped "1446" | 1,446.143 |
| Indian Creek, at mouth of, 150 feet northeast of W. C. Tabor's residence, at north edge of road; chisel point on large bowlder, chiseled "1506 U. S.". | 1,505.68 |



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| | Feet. |
|---|---|
| Indian Mill, 1 mile west of, west edge of road; chisel point on ledge, chiseled "1458 U. S." | 1,457.85 |
| Indian Mill, 250 feet north of mouth of Bradshaw Creek, west edge of road, in rock ledge; bronze tablet stamped "1490 B1 1912" | 1,490.188 |
| T. G. Lowe's farmhouse, 600 feet north of, west edge of road; chisel point on slate ledge, painted "1553 U. S." | 1,553.41 |
| Forest Hill, 2 miles south of, west edge of road, at T road; copper nail in base of 1-foot oak tree, scribed "1610 U. S." | 1,609.67 |
| Forest Hill, 1 mile south of, west edge of road; chisel point on slate ledge, chiseled "1728 U. S." | 1,727.97 |
| Forest Hill, south edge of road, in front of "M. E. Church," in rock; bronze tablet stamped "1933 B2 1912" | 1,932.899 |
| Forest Hill, 1 mile northeast of, north edge of road, at junction; copper nail in base of 10-inch oak tree, scribed "1906 U. S." | 1,906.23 |
| Marie, 800 feet south of road junction, west edge of road, at summit of hill; copper nail in base of 2-foot oak tree, scribed "2099 U. S." | 2,099.18 |
| Greenbrier Springs, 1.3 miles south of, east edge of road, in front of James Garten's farmhouse; chisel point on rock, chiseled "1673 U. S." | 1,672.71 |
| Greenbrier Springs, 0.2 mile west of, at road forks; chisel point on flat rock, chiseled "1457 U. S." | 1,456.84 |
| Greenbrier Springs, 60 feet south of Barger Springs post office, south edge of road, in front of A. G. Flanagan's cottage, in flat rock; bronze tablet stamped "1485 B3 1912" | 1,484.602 |
| Talcott, 1.6 miles south of, summit of hill at road forks; copper nail in base of chestnut tree 1 foot in diameter, scribed "1876 U. S." | 1,876.29 |
| Talcott, in east end of south abutment of steel bridge over Greenbrier River; bronze tablet stamped "1501 B4 1912" | 1,501.112 |

## MEADOW CREEK QUADRANGLE.

[Latitude 37° 45′–38°; longitude 80° 45′–81°.]

**From point 0.3 mile south of Sandstone (New Richmond post office) east up Laurel Creek 6 miles (double-spur line).**

| | |
|---|---|
| Sandstone, 0.3 mile east of, west side of railroad bridge, in north abutment; aluminum tablet stamped "1292" | 1,291.732 |
| Sandstone, 0.9 mile east of, south edge of road, 1,000 feet west of road forks; copper nail in base of 18- inch oak tree, scribed "1536 U. S." | 1,536.18 |
| Sandstone, 2 miles east of, east edge of road, 1,300 feet west of schoolhouse, east edge of creek, 300 feet west of J. B. Johnson's house; chisel point on bowlder, chiseled "1496 U. S." | 1,495.80 |
| Sandstone, 3.3 miles southeast of, 1.2 miles northwest of Ramp, east edge of road, in face of rock; bronze tablet stamped "1682 B 1912" | 1,682.441 |
| Ramp, east edge of road, 50 feet east of post office; chisel point on rock, chiseled "1754 U. S." | 1,753.97 |
| Ramp, 0.4 mile east of, north edge of road, at forks; chisel point on rock, chiseled "1808 U. S." | 1,808.31 |
| Ramp, 1.3 miles east of, south edge of road, 200 feet east of G. B Kesler's farmhouse, north edge of creek, in rock; bronze tablet stamped "1920 B 1912" | 1,920.067 |

**From Meadow Creek northeast along road up Meadow Creek to Springdale, thence northwest to Sewell.**

| | |
|---|---|
| Meadow Creek, 0.2 mile west of, in top of west abutment at north side of railroad bridge; aluminum tablet stamped "1269" | 1,270.126 |
| Meadow Creek, 1 mile northeast of, 10 feet east of track; chisel point on ledge, chiseled "1400 U. S." | 1,399.93 |

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| | Feet. |
|---|---|
| Buery Town, 0.3 mile northeast of, 20 feet west of track; spike in base of telephone pole, scribed "1556 U. S." | 1,556.17 |
| Tina, 0.6 mile southwest of, south edge of track; chisel point on bowlder, chiseled "1776 U. S." | 1,775.66 |
| Tina, 0.4 mile southwest of, 20 feet west of track, at road crossing, 150 feet north of schoolhouse, 150 feet north of switch, in bowlder; bronze tablet stamped "1868 B 1912" | 1,867.723 |
| Tina, 0.9 mile northeast of, 200 feet south of first switchback, east edge of track; chisel point on bowlder, chiseled "2021 U. S." | 2,020.92 |
| Meadow Bridge, 1 mile southwest of, west end of south abutment of culvert; chisel point, chiseled "2239 U. S." | 2,238.72 |
| Meadow Bridge, 20 feet northeast of station, 20 feet west of road crossing, in large bowlder; bronze tablet stamped "2422 B 1912" | 2,421.507 |
| Meadow Bridge, 1.1 miles northeast of, 250 feet north of switch, at road crossing; chisel point on bowlder, chiseled "2503 U. S." | 2,502.55 |
| Springdale, 0.7 mile southwest of, south side of track, at west end of hill; chisel point on rock, chiseled "2721 U. S." | 2,721.18 |
| Springdale, 300 feet east of station, south edge of public road, in ledge; bronze tablet stamped "2770 B 1912" | 2,769.841 |
| Springdale, 1.1 miles northwest of, north side of road; oak tree 1 foot in diameter at fence corner, scribed "3044 U. S." | 3,044.15 |
| Springdale, 2.2 miles northwest of, west edge of road; nail in root of 3½-foot oak tree, scribed "3176 U. S." | 3,176.06 |
| Springdale, 3 miles northwest of, on stone stoop of Unionton Sub. Dist. No. 5 school building; chisel point, chiseled "3059 U. S." | 3,058.60 |
| Springdale, 3.5 miles northwest of, 650 feet west of S. T. Gilkeson's blacksmith shop, north edge of road, in large ledge; bronze tablet stamped "3244 B 1912" | 3,244.018 |
| S. T. Gilkeson's blacksmith shop, 0.9 mile northwest of, 500 feet west of forks of road, west edge of road; nail in root of 2-foot chestnut tree, scribed "3245 U. S." | 3,244.97 |
| Danese, 1.7 miles southeast of, at forks of road leading south; nail in root of 1-foot white oak tree, marked "2978 U. S." | 2,977.39 |
| Danese, 0.6 mile southeast of, east edge of road; nail in root of 2-foot oak tree, scribed "2702 U. S." | 2,701.88 |
| Danese, 100 feet east of, 40 feet north of Lady Hall Sub. Dist. No. 5 school building, south edge of road, in ledge; bronze tablet stamped "2637 B 1912" | 2,636.896 |
| Maplewood, 0.9 mile south of, south edge of road, where road turns to right, 25 feet north of Maplewood Chapel (Methodist Episcopal Church); chisel point on cement walk, chiseled "2705 U. S." | 2,704.53 |
| Maplewood, 50 feet south of post office, south edge of road, at road forks; chisel point on rock, chiseled "2717 U. S." | 2,716.58 |
| Maplewood, 0.6 mile northwest of, 200 feet north of railroad right of way, west edge of road; chisel point on bowlder, chiseled "2618 U. S." | 2,617.68 |
| Maplewood, 1.6 miles west of, at forks of road to S. E. Gwinn's farmhouse, south edge of road; nail in root of 1-foot sourwood tree, scribed "2872 U. S." | 2,871.83 |
| Landisburg, 1.9 miles southeast of, 300 feet west of S. E. Gwinn's farmhouse, south edge of road; chisel point on bowlder, chiseled "2769 U. S." | 2,768.46 |
| Landisburg, 800 feet west of, 20 feet north of track, in ledge; bronze tablet stamped "2365 B 1912" | 2,364.577 |
| Landisburg, in front of post office; top of rail | 2,349.2 |

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| | Feet. |
|---|---|
| Landisburg, 1.9 miles northeast of, at summit of hill, south edge of track, 100 feet west of road crossing; nail in root of 1-foot chestnut tree, scribed "2417 U. S." | 2,416.89 |
| Clifftop, 1.9 miles west of, west edge of road; nail in root of 12-inch oak tree, scribed "2097 U. S." | 2,096.52 |
| Clifftop, 2.6 miles southwest of, 100 feet west of railroad bridge over Glade Creek, south side of creek, 20 feet west of water tank, in face of cliff; bronze tablet stamped "1967 B 1912" | 1,967.059 |
| Sewell, 3.2 miles east of, south edge of road; chisel point on bowlder, chiseled "1854 U. S." | 1,853.33 |
| Sewell, 2.1 miles east of, south edge of road; chisel point on bowlder, chiseled "1625 U. S." | 1,624.52 |

**From Springdale north along highway to Riverside. (Line leveled twice.)**

| | |
|---|---|
| Springdale, 1.1 miles northwest of, 200 feet south of road crossing, 200 feet south of switch; chisel point on west end of north abutment, chiseled "2675 U. S." | 2,674.95 |
| Springdale, 2.6 miles north of, 40 feet east of track; copper nail in base of 3-foot oak tree, scribed "2543 U. S." | 2,543.10 |
| Springdale, 3.9 miles north of, east edge of track; chisel point on bowlder, chiseled "2465 U. S." | 2,465.05 |
| Sturgeon Branch, 200 feet east of station, south end of west abutment of railroad bridge; bronze tablet stamped "2420 B 1912" | 2,419.396 |
| Simms, 40 feet north of station; chisel point on bowlder, chiseled "2419 U. S." | 2,419.09 |
| Rainelle, 1 mile west of, 40 feet west of track; copper nail in base of 2½-foot white-oak tree, scribed "2399 U. S." | 2,398.97 |
| Rainelle, in west side of stoop of bank building; bronze tablet stamped "2425 B 1912" | 2,424.601 |
| Rainelle, 1.6 miles northeast of, 40 feet north of track; copper nail in base of 1-foot oak tree, scribed "2393 U. S." | 2,392.49 |
| Aldrich Camp, 3.3 miles northeast of Rainelle, 40 feet south of track, at point where river turns north, in large bowlder; bronze tablet stamped "2395 B 1912" | 2,395.396 |

## Clay, Clendenin, Fayetteville, and Montgomery 15′ quadrangles (Kanawha Falls 30′ quadrangle).

### CLAY, FAYETTE, KANAWHA, AND NICHOLAS COUNTIES.

Leveling in Clay and Fayetteville quadrangles in 1898 by Hargraves Wood; in Clendenin and Montgomery quadrangles in 1907 by Orr Meredith; in Montgomery quadrangle in 1908 by E. S. Dawson; and in 1908 in all by C. M. Bennett.

### CLAY 15′ (KANAWHA FALLS 30′) QUADRANGLE.

[Latitude 38° 15′–38° 30′; longitude 81°–81° 15′.]

**From Elk Creek east via Lockwood on Otter Creek to Zela.**

| | Feet. |
|---|---|
| Lockwood, 0.1 mile east of, north of road opposite L. N. Simm's house, 200 feet east of R. L. Dickson's house, at east foot of Summers hill, in ledge of rock; bronze tablet stamped "1088 Knwa" | 1,087.741 |

**Near Drennen.**

| | |
|---|---|
| Drennen, 0.4 mile south of post office, 200 feet north of house, on upper side of road, 50 feet southeast of spring by roadside, east of road, on sandstone outcrop; chiseled square marked "1289" | 1,288.27 |

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**From King east along Coal & Coke Ry. to Upper Leatherwood (unadjusted line closing 1 foot low at Upper Leatherwood).**

| | Feet. |
|---|---|
| King station, 0.44 mile east of, 1.18 miles west of Procious post office, 10 feet north of railroad, on large sandstone bowlder; chiseled square, marked "655" | 654.71 |
| Camp, in front of station; top of rail | 652.7 |
| Procious (Camp station), 0.35 mile east of post office, 3.91 miles west of Shelley Junction station, 10 feet south of railroad, on short tangent, nearly opposite frame dwelling of Mr. Walker, on sandstone bowlder; chiseled square, marked "655" | 654.93 |
| Procious, 0.97 mile east of, 3.29 miles west of Shelley Junction station, 12 feet south of railroad, along long tangent, 1,500 feet east of point opposite dwelling house on north of track, in sandstone outcrop; aluminum tablet stamped "658" | 657.624 |
| Shelley Junction, 0.91 mile west of, 10 feet south of railroad, inside of long, sharp curve, nearly opposite mouth of creek on north side of river, on large sandstone bowlder; chiseled square, marked "665" | 664.83 |
| Shelley Junction, 0.39 mile west of, 10 feet southwest of railroad, on 1,000-foot tangent, 380 feet west of switch near Shelley Junction, nearly opposite mouth of Big Laurel Creek, in sandstone outcrop; aluminum tablet stamped "666" | 665.965 |
| Angeline, in front of station; top of rail | 665.4 |
| Angeline, 1.08 miles east of post office, 1.07 miles west of Birch station, 30 feet south of railroad, just west of long, sharp curve in track, on sandstone bowlder; chiseled square, marked "667" | 666.20 |
| Birch, in front of station; top of rail | 670.1 |
| Eldorado, 2.03 miles west of post office, 30 feet south of railroad, on outside of long curve, 250 feet east of railroad crossing, in sandstone outcrop; aluminum tablet stamped "679" | 678.262 |
| Shelton, in front of station; top of rail | 674.1 |
| Big Sycamore, in front of station (Eldorado post office), top of rail | 676.1 |
| Dorfee, in front of station; top of rail | 677.2 |
| Dorfee, 1 mile east of station, 1.02 miles west of Elkhurst station, 10 feet south of railroad, along short tangent, 380 feet east of point opposite dwelling on north of track, in sandstone outcrop; aluminum tablet stamped "682" | 681.774 |
| Elkhurst, in front of station; top of rail | 683.82 |
| Yankee Dam, 0.54 mile east of post office, 3.4 miles west of Leatherwood station, 10 feet north of railroad, 100 feet west of south end of suspension tram bridge over Elk River to sawmill, on solid sandstone bowlder, chiseled square; marked "690" | 689.61 |
| Yankee Dam, 1.07 miles east of post office, 2.33 miles west of Upper Leatherwood station, 12 feet south of railroad on short tangent, at mouth of small hollow to right, at west end of small fill, in solid sandstone bowlder; aluminum tablet stamped "697" | 696.724 |

**From Upper Leatherwood east along Coal & Coke Ry. to Clay, thence southeast along Buffalo Creek & Gauley R. R. to mouth of Sand Fork.**

| | |
|---|---|
| Upper Leatherwood, 200 feet west of station, in north end of east abutment to three-span plate-girder bridge over Leatherwood Creek; aluminum tablet stamped "702" | 702.333 |
| Leatherwood station, 1 mile east of (2.07 miles west of Clay), 12 feet south of railroad on short tangent, just east of long curve, nearly opposite deep hollow north of river, on sandstone outcrop, chiseled square; marked "705" | 705.80 |

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[illegible] 816

[illegible] 13

[illegible] 660

[illegible] 14

[illegible] 094

[illegible] 73

[illegible] 14.7

[illegible] 32.27

[illegible] 98.667

[illegible] 919.848

[illegible] 1,266.997

[illegible] 1,020.40

[illegible] 994.234

[illegible] 929.93

[illegible] 905.517

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| | Feet. |
|---|---|
| Vaughan, 1.59 miles northeast of, 10 feet north of railroad, 40 feet north of sharp curve in creek, near road crossing, 600 feet west of point opposite dwelling, 2 feet below coal horizon, on sandstone outcrop; chiseled square, marked "860" | 860.97 |
| Vaughan, 0.22 mile east of post office, at upper side of county road, 50 feet north of mouth of hollow extending northeast to Walker Knob, near north end of lumber yard in Vaughan, 30 feet north of Chesapeake & Ohio Ry. track, in sandstone outcrop; aluminum tablet stamped "810" | 811.034 |
| Vaughan, 0.8 mile southwest of, in north edge of creek, 20 feet south of Chesapeake & Ohio Ry., 150 feet north of county road, 1,200 feet east of milepost marked "G-12" on east side and "G-13" on west, on large bowlder; chiseled square, marked "789" | 790.32 |
| Vaughan, 3.3 miles southwest of, in railroad cut, 10 feet north of railroad, opposite mouth of Dorsey Branch, 250 feet north of residence of C. D. Backus, in face of thick sandstone outcrop; aluminum tablet stamped "739" | 740.668 |
| Vaughan, 3.8 miles southwest of, 3.89 miles northeast of Belva station, 10 feet north of railroad, 60 feet north of creek and road, nearly opposite residence on south side of creek, 60 feet west of north end of wooden foot-bridge across Twentymile Creek, on sandstone outcrop; chiseled square, marked "725" | 726.44 |

## CLENDENIN 15′ (KANAWHA FALLS 30′) QUADRANGLE.

[Latitude 38° 15′–38° 30′; longitude 81° 15′–81° 30′.]

**From point 1.3 miles northeast of Coal Fork station on Campbell Creek R. R. northeast via Fivemile Fork and Right Fork of Blue Creek to point 1.52 miles northeast of Quick, thence southeast up Blue Creek, Middle Fork, and Pond Fork to Pond Gap, thence southwest to Ward station.**

| | |
|---|---|
| Fivemile Fork, 0.43 mile north of mouth, 125 feet northeast of house, north of road, in sandstone bowlder; aluminum tablet stamped "719" | 717.916 |
| Quick, 1.3 miles west of, 0.25 mile west of fork of road north to Coco, between road and Right Fork of Blue Creek, on south edge of road, in sandstone bowlder; aluminum tablet stamped "830" | 829.703 |
| Quick, 2.9 miles east of, 0.2 mile east of railroad crossing, in east end of rock cliff lying along railroad east of Sandlick Branch; aluminum tablet stamped "718" | 717.257 |
| Middle Fork, 0.5 mile west of station, 0.4 mile east of Rockcamp Fork, in masonry at west end of railroad bridge; aluminum tablet stamped "768" | 767.551 |
| Middle Fork, 2.38 miles southeast of, 3.25 miles northwest of Blakeley, 0.21 mile southeast of Turner Fork, at north end of railroad trestle, creek, and road at foot of cliff, in rock ledge at south side of track; aluminum tablet stamped "865" | 863.419 |
| Blakeley, 0.64 mile north of station, south of track at Kanawha & West Virginia R. R. crossing, 4 feet above track, in sandstone cliff; aluminum tablet stamped "1078" | 1,075.566 |
| Blakeley, in front of station; top of rail | 1,112.4 |
| Mammoth, 3.75 miles northeast of, 300 feet up from foot of hill at head of Hurricane Fork of Kelly Creek, north of road, in sandstone ledge; aluminum tablet stamped "1273" | 1,270.708 |

**From point 1.52 miles northeast of Quick post office north along public highways via Falling Rock Creek and Coal & Coke Ry. to Wellford.**

| | |
|---|---|
| Odell, east of road, in southwest corner of stone foundation to dwelling; aluminum tablet stamped "1215" | 1,214.027 |

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| | Feet. |
|---|---|
| Odell, 3.06 miles northeast of, 350 feet north of company store at mouth of Evans Fork of Falling Rock Creek, 60 feet north of road to Apgah at foot of hill, in large sandstone; aluminum tablet | 794.414 |
| Weir, 2.9 miles south of, at north side of creek bottom, 250 feet north of Falling Rock Creek, 0.38 mile east of cannel-coal mine, in bowlder; aluminum tablet stamped "714" | 713.879 |
| Weir, 0.16 mile south of post office, 400 feet south of trestle over Laurel Fork creek, on opposite side of track, north of railroad, in sandstone rock; aluminum tablet stamped "647" | 646.602 |
| Reamer, 1,600 feet west of, south of Coal & Coke Ry. track, in capstone of viaduct over Leatherwood Creek; aluminum tablet stamped "618" | 617.404 |
| Clendenin, 1.14 miles north of, near ford crossing to house on east bank of Big Sandy Creek, west of road near foot of bank, in sandstone outcrop; aluminum tablet stamped "624" | 623.339 |

**From Clendenin east along Coal & Coke Ry. to Rand.**

| | |
|---|---|
| Clendenin, 0.33 mile north of, 600 feet north of dwelling, at upper side of road up Big Sandy Creek, on sandstone outcrop; chiseled square, painted "621" | 620.70 |
| Turner, in front of station; top of rail | 636.2 |
| Turner, 0.72 mile east of station, 1.1 miles west of Queen Shoals station, 12 feet south of tracks, nearly opposite west house in group of four, in brown sandstone bowlder; aluminum tablet stamped "645" | 643.991 |
| Barren Creek, 0.26 mile west of post office, 20 feet south of track, opposite east end of warehouse near lampblack factory, on sandstone bowlder; chiseled square, marked "644" | 643.45 |
| Barren Creek, in front of post office; top of rail | 644 |
| Porter, 0.82 mile west of station, 10 feet southwest of track, in blue sandstone outcrop; aluminum tablet stamped "646" | 645.511 |
| Porter, in front of station; top of rail | 644.3 |
| Porter, 0.4 mile east of station, 10 feet south of track, 300 feet east of house on opposite side of track, on brown sandstone bowlder; chiseled square marked "648" | 647.91 |

**FAYETTEVILLE 15′ (KANAWHA FALLS 30′) QUADRANGLE.**

[Latitude 38°–38° 15′; longitude 81°–81° 15′.]

**From Lock 2 east on Kanawha & Michigan Ry. to Gauley.**

| | |
|---|---|
| Harewood, 600 feet east of coal tipple, in top of coping at north end of Kanawha & Michigan Ry. culvert; aluminum bolt stamped "638 Knwa" | 637.328 |

**From Gauley north along Chesapeake & Ohio R. R. to point 3 miles north of Belva.**

| | |
|---|---|
| Vanetta, 0.04 mile south of post office, 0.97 mile north of Gauley Bridge, 10 feet north of railroad, 1,000 feet east of Vanetta coal tipple, 400 feet east of Sand (Dan ?) Branch, on large sandstone bowlder; chiseled square, marked "679" | 680.60 |
| Vanetta, in front of post office; top of rail | 681.5 |
| Gamoca, 0.32 mile south of post office, 1.08 miles north of Vanetta post office, 10 feet south of railroad, on south bank of Gauley River opposite mouth of Big Creek, 2,000 feet west of milepost marked "G-4-G-11," in sandstone outcrop; aluminum tablet stamped "684" | 685.257 |
| Gamoca, in front of post office; top of rail | 685.8 |

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| | Feet. |
|---|---|
| Wyndal, 1.55 miles south of post office, 1 mile north of Gamoca post office, 10 feet south of railroad, 1,000 feet west of milepost marked "G-5-G-10," on shaly sandstone outcrop; chiseled square, marked "688" | 689.64 |
| Wyndal, in front of post office; top of rail | 695.4 |
| Belva, 0.4 mile south of station, 0.6 mile north of Wyndal post office, in south face of capstone on east end of south abutment of bridge across Gauley River; shank of old bronze tablet (old bench mark which was stamped "711") | 710.006 |
| Belva, in front of station; top of rail | 706.9 |
| Belva, 2.6 miles northeast of, 20 feet north of railroad, 40 feet south of creek, 220 feet east of point opposite mouth of Bell Creek, on large sandstone bowlder; chiseled square, marked "700" | 701.71 |
| **From Belva east along Gauley River to Little Elk Creek.**[1] | |
| Belva, 4.8 miles east of, 0.5 mile northeast of mouth of Elk Creek, 15 feet northwest of road, in ledge of rock; aluminum bolt stamped "752 Knwa". | 751.540 |
| **From Fayette north along highway to Lockwood.** | |
| Nuttallburg, 1.47 miles west of, 220 feet west of milepost "Cin.-262," south of track, in very high bowlder; aluminum tablet stamped "924" | 923.546 |
| Lansing, 0.36 mile southwest of post office, east of long overhanging outcrop, 75 feet west of balanced bowlder south of road, 2 feet above grade, in sandstone outcrop north of road; aluminum tablet stamped "1583" | 1,582.345 |
| Lansing, 0.77 mile northeast of post office, 60 feet south of wooden culvert over branch where road turns sharply to east, halfway down hill to Mill Creek, west of road, on sandstone outcrop; chisel cut marked "1717" | 1,716.23 |
| Lansing, 1.5 miles northeast of, 200 feet west of house north of road, on south edge of road, on sandstone ledge; chisel cut marked "1766" | 1,765.78 |
| Lansing, 2.2 miles northeast of, 0.17 mile east of pine grove, at slight hollow to south, 50 feet west of bend to north, south of road, in sandstone outcrop; aluminum tablet stamped "1814" | 1,813.195 |
| Hico, 1.5 miles southwest of, 40 feet east of road north leading to Thomas Kinkaid's place, 100 feet west of wooden bridge over branch, 140 feet east of branch, north of road, on sandstone outcrop; chiseled square, marked "1885" | 1,884.84 |
| Hico, 0.7 mile west of post office, 175 feet east of Timber Lake schoolhouse, at south edge of road, on Mill Creek, in sandstone outcrop; aluminum tablet stamped "1955" | 1,954.079 |
| Deitz, 3.76 miles southwest of, 300 feet east of turnpike road, north of road, on sandstone outcrop; chiseled square, marked "2034" | 2,032.98 |
| Deitz, 1.3 miles south of, 75 feet east of first turn in road below top of hill, ground facing north and opposite side of Osborn Creek to church and school, 130 feet east of house on west side of road, 10 feet west of slight hollow, under white walnut tree, in sandstone bowlder; aluminum tablet stamped "1798" | 1,797.058 |
| Deitz, 0.3 mile west of post office, 150 feet west of branch, 90 feet north of sharp turn to north where road approaches hollow, west of road, on sandstone ledge; chiseled square marked "1814" | 1,813.66 |
| Ramsey, 0.56 mile north of, 30 feet east of Laurel Creek, 600 feet north of Gwinn Branch, opposite side of creek from house, 12 feet west of road, in sandstone bowlder; aluminum tablet stamped "1427" | 1,426.528 |
| Lucas, 500 feet northwest of post office, on north side of Gauley River, 130 feet west of Wood's ferry landing, north of road in huge conglomerate bowlder; aluminum tablet stamped "1006" | 1,005.058 |

[1] Part of old line to Nicholas quadrangle.

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| | Feet. |
|---|---|
| Albion, 1.12 miles east of, 125 feet northeast of Pinegrove schoolhouse, 150 feet southwest of wooden bridge over branch, north of road, 1 foot above ground, in sandstone outcrop; aluminum tablet stamped "1306".. | 1,305.023 |
| **From Cotton Hill south along highway to point on Loop Creek 2 miles west of Wriston.** | |
| Cotton Hill, 1.14 miles west of, 150 feet south of milepost "Cin. 253," 7 feet east of track, in top of large rock; aluminum tablet stamped "771"..... | 770.240 |
| Beckwith, 0.88 mile west of post office, 4.08 miles east of Dempsey, on north edge of county road, 150 feet west of fork of road to south, nearly opposite deep hollow and schoolhouse, in solid sandstone bowlder; aluminum tablet stamped "1223"..... | 1,221.928 |
| Dempsey, 1.8 miles east of, opposite deep hollow, on north edge of county road, near top of bank, on sandstone outcrop; chiseled square, marked "1321"..... | 1,320.75 |
| Dempsey, 0.98 mile east of post office, 10 feet northwest of county road, 50 feet northwest of gristmill owned by W. H. Nugen, 20 feet south of blacksmith shop, 200 feet east of Laurel Hill schoolhouse, in sandstone outcrop; aluminum tablet stamped "1325"..... | 1,324.582 |
| Dempsey, at fork of road to south up left fork of Laurel Creek, 200 feet east of Dogged Chapel, on solid sandstone bowlder; chiseled square, marked "1345"..... | 1,344.48 |
| Dempsey, 2.03 miles west of, at north edge of county road, 360 feet from foot of hill on Laurel Creek side, in solid sandstone bowlder; aluminum tablet stamped "1531"..... | 1,530.264 |
| Wriston, 0.73 mile east of post office, at south edge of county road, opposite and 300 feet from residence of B. W. Settle, on sandstone outcrop; chiseled square, marked "1535"..... | 1,534.69 |
| Wriston, 0.9 mile west of post office, 4.05 miles southeast of Kincaid post-office, 20 feet north of Deepwater R. R. track, 400 feet south of county road, at east end of rock cut, 600 feet southeast from residence of K. Kincaid, 1,600 feet east of milepost "DW-13," in sandstone bowlder; aluminum tablet stamped "1409"..... | 1,408.031 |
| **Near Robson from mileposts 7 to 4 on Virginian Ry.**[1] | |
| Robson, 0.63 mile south of post office, just south of Underwood's store, 60 feet south of road crossing, 700 feet north of milepost "DW-6," on top stone at west corner of north abutment of bridge across Loop Creek; chiseled square, marked "1000"..... | 999.13 |
| Robson, 1.08 miles north of post office, 150 feet southwest of Virginian Ry. track, 300 feet west of station, 1,200 feet east of milepost "DW-4," in flat sandstone bowlder; aluminum tablet stamped "874"..... | 872.963 |
| **From Deepwater east to Kanawha Falls.** | |
| Kanawha Falls, 3,000 feet southwest of station, 500 feet west of hollow, on south end of stone culvert; chiseled square, marked "659"..... | 658.18 |

**MONTGOMERY 15′ (KANAWHA FALLS 30′) QUADRANGLE.**

[Latitude 38°-38° 15′; longitude 81° 15′-81° 30′.]

| | |
|---|---|
| **From Dickinson southeast to Cabin Creek Junction, thence south along Chesapeake & Ohio R. R. and southwest 3 miles up Coal Fork.** | |
| Cabin Creek Junction, 1 mile south of, east of railroad and creek, 240 feet north of hollow, 0.3 mile south of mouth of Cabin Creek, in outcrop of sandstone; chiseled square, painted "621"..... | 620.10 |

[1] Other elevations on this railroad are given in list for Montgomery quadrangle.

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| | Feet. |
|---|---|
| Dry Branch, 0.7 mile northwest of post office, north of railroad and river, 40 feet east of trail over point, in sandstone cliff; aluminum tablet stamped "621" | 620.573 |
| Dry Branch, 1.5 miles southeast of, at south end of cut, east of railroad, 0.1 mile north of coal tipple, on top of outcrop of rock; chiseled square, painted "658" | 657.25 |
| Sharon, 200 feet west of post office, 75 feet west of railroad bridge over Cabin Creek, opposite mouth of Paint Branch, between station and Cabin Creek, in second stone in abutment at northeast end of bridge over small run; aluminum tablet stamped "668" | 667.191 |
| Ohley, 1.2 miles northwest of post office, west of Chesapeake & Ohio Ry., 400 feet north of mouth of Coal Fork, in outcrop of rock; aluminum tablet stamped "742" | 740.840 |
| Ohley, 4 miles west of, north of road, in bank, 30 feet off road, 0.1 mile northwest of house, in large rock bowlder; aluminum tablet stamped "919" | 917.858 |

**From point 1.95 miles west of Cedar Grove northeast up Kelly Creek to Ward.**

| | |
|---|---|
| Cedar Grove, 1.95 miles west of, in east abutment of railroad culvert; aluminum tablet stamped "618" | 617.316 |
| Cedar Grove, 1,500 feet east of station, in masonry at west end of culvert on Kelly Creek & Northwestern R. R.; aluminum tablet stamped "615" | 612.547 |
| Ward, 900 feet east of station, 15 feet south of railroad, at edge of Kelly Creek, in large bowlder; aluminum tablet stamped "717" | 714.629 |

**From point 2.13 miles west of Wriston north down Loop Creek along Virginian Ry. to Deepwater.[1]**

| | |
|---|---|
| Wriston, 2.13 miles west of, 2.82 miles east of Kincaid, 800 feet east of milepost "DW-12," nearly opposite residence of Mr. Kincaid, on top step of south end of small stone culvert, chiseled square; marked "1289" | 1,288.62 |
| Kincaid, 0.97 mile south of, 8 feet west of Virginian Ry., on outside of long curve, 100 feet west of Loop Creek, in sharp bend, 500 feet south of milepost "DW-10," in sandstone outcrop; aluminum tablet stamped "1184" | 1,183.785 |
| Kincaid, opposite and 200 feet west of post office, 1,200 feet south of mouth of Lick Branch, on top stone of east corner of north abutment of railroad bridge; chiseled square, marked "1137" | 1,136.61 |
| Page, 1.26 miles north of post office, 8 feet west of Virginian Ry., 250 feet south of milepost "DW-7," opposite coal hollow and town of North Page, in sandstone outcrop; aluminum tablet stamped "1065" | 1,064.190 |
| Robson, 3.33 miles north of, 500 feet north of point opposite mouth of Big Right Fork, 60 feet north of milepost "DW-2," on east corner of south bridge seat of double-span triple I-beam bridge 4; chiseled square, marked "769" | 768.65 |
| Robson, 4.03 miles north of (0.88 mile south of Deepwater post office), 200 feet south of point opposite mouth of Little Right Fork, 2,000 feet south of milepost "DW-1," in west corner of north bridge seat of railroad bridge 1 across Loop Creek; aluminum tablet stamped "715" | 714.134 |
| Deepwater, at railroad crossing; top of rail, marked "651" | 649.9 |
| Deepwater, 1,000 feet east of post office, 30 feet north of Chesapeake & Ohio Ry. tracks, on sandstone bowlder; chiseled square, marked "647" | 646.38 |

[1] Other elevations near Robson will be found in list for Fayetteville quadrangle.

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## Charleston Special, Madison, Peytona, and St. Albans quadrangles.

### BOONE, KANAWHA, LINCOLN, AND PUTNAM COUNTIES.

The elevations in the following list are based upon corrected levels of the Great Kanawha River survey by the army engineers, checked by primary leveling from the Ohio River survey precise-level line. The elevations now given are 3.855 feet greater than by the datum of the old Great Kanawha River levels.

Leveling was done in each quadrangle in 1896 and 1897 by Hargraves Wood; additional elevations were established in 1907 in the Charleston Special by R. A. Kiger, and in 1908 in the Peytona and Madison quadrangles by E. S. Dawson.

The elevations stamped on the standard bench marks set in 1897 and 1908 are mostly 1 foot too high, while the elevations stamped on those set in 1896 and 1907 are generally correct.

### CHARLESTON SPECIAL (CHARLESTON 30′) QUADRANGLE.

[Latitude 38° 15′–38° 30′; longitude 81° 30′–81° 45′.]

**From point 1.03 miles west of Dana east to point 1.3 miles northeast of Coal Fork station on Campbell Creek R. R.**

| | Feet. |
|---|---|
| Coal Fork, 1.3 miles northeast of station, 10 feet west of track at west end of cut, in sandstone; aluminum tablet stamped "637" | 636.726 |

**From Mound east to Charleston, thence north to Wallace on Tupper Creek.**

| | |
|---|---|
| Mound (Lock 6 on Kanawha River); top of coping stone (elevation by the Engineer Corps, 565.5) | 569.355 |
| Charleston, 2.75 miles northwest of, on sandstone from north wall of stone-arch bridge over Twomile Creek, known as Twomile Bridge; chiseled cross in square | 596.10 |
| Charleston, 1.25 miles northwest of state capitol, on sandstone wall at southeast corner of stone-arch bridge, 0.5 mile northwest of suspension bridge across Elk River; chiseled cross in square | 593.70 |
| Charleston, in southwest corner of state capitol; bronze tablet stamped "602–C" | 600.703 |
| Patrick, 3 miles north of, 200 feet southwest of Methodist Church known as Wesley Chapel, on Twomile Creek; copper bolt in bowlder, stamped "604–C" | 603.826 |
| Wallace, 0.75 mile east of store (8 miles north of Patrick), on south edge of road, 600 feet east of James Wallace's house, in bowlder; copper bolt stamped "668–C" | 666.752 |
| Rocky Fork, 3 miles north of, south side of Martin Branch, 0.25 mile above mouth, 175 feet west of first crossing near schoolhouse, in rock ledge 1 foot above grade; copper bolt stamped "592–C" | 591.017 |

**From Mound north to Tyler Creek schoolhouse.**

| | |
|---|---|
| Mound, 2 miles northwest of, 0.25 mile southeast of forks of road near Tyler schoolhouse, in rock 20 feet west of drain; copper bolt stamped "623–C" | 623.371 |

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**From Mound south up Middle Fork of Davis Creek to mouth of Long Branch.**

| | Feet. |
|---|---|
| Ruth, 2 miles east of, on west side of Middle Fork of Davis Creek, 900 feet north of mouth of Long Branch, between third and second crossings north of schoolhouse, in large bowlder near Davis Creek; copper bolt stamped "C-659" | 659.262 |

**From Marmet south to Brownstown.**

| | |
|---|---|
| Lock 5 (near Marmet); coping (U. S. Engineer Corps elevation, 572.50) | 576.355 |
| Rush Creek, 0.75 mile northwest of Chesapeake & Ohio Ry. culvert over, in middle one of three ledges of rock west side Right Fork Rush Creek; copper bolt stamped "639-C" | 638.943 |

**ST. ALBANS 15′ (CHARLESTON 30′) QUADRANGLE.**

[Latitude 38° 15′-38° 30′; longitude 81° 45′-82°.]

**From Poca south along Kanawha & Michigan Ry. to St. Albans.**

| | |
|---|---|
| Poca station, 300 feet south of, in west side of south abutment of highway bridge over Correly Branch; copper bolt stamped "572-C" | 572.341 |
| Lock 7; top of coping (U. S. Engineer Corps elevation, 555.50) | 559.355 |
| St Albans, fence line on west side of First Street, 60 feet north of north rail of Chesapeake & Ohio Ry. track, in center of west base of monument, top of limestone post projecting 1 foot above ground; copper bolt (Coast and Geodetic Survey elevation, 594.78) | 594.691 |

**From St. Albans northwest along Chesapeake & Ohio Ry. to Scott station.**

| | |
|---|---|
| St. Albans, in front of station; top of rail | 596.4 |
| Scott, 75 feet south of station, in Pine's orchard, 50 feet south of Chesapeake & Ohio Ry. tracks; iron post stamped "693-C" | 692.856 |

**From St. Albans west via Tackett Creek to Young's store, thence south to Garretts Bend, thence northeast to St. Albans.**

| | |
|---|---|
| St. Albans, 5 miles west of, south of road, first house south of Young's store, belonging to John Hodges, in east chimney 6 feet from ground; copper bolt stamped "U. S. G. S. 737" | 737.294 |
| Garretts Bend, 2 miles north of, Trace Fork of Mud River, 200 feet below mouth of Twomile Branch, 400 feet northwest of Anderson McAllister's house, north side of stream, in huge rock; copper bolt stamped "U. S. G. S. 669" | 669.125 |
| Tornado, 1.5 miles southwest of, on road up Falls Creek, on south side of road 150 feet above the first crossing of Falls Creek; iron post stamped "614" | 613.708 |

**PEYTONA 15′ (CHARLESTON 30′) QUADRANGLE.**

[Latitude 38°-38° 15′; longitude 81° 30′-81° 45′.]

**From point 3 miles up Coal Fork of Cabin Creek west via Coal River and Laurel Creek to mouth of Robinson Creek, 1.5 miles east of Uneeda.**

| | |
|---|---|
| Ohley, 4.7 miles southwest of, north of road, opposite house, 400 feet northwest of house and hollow, near bend in creek, on rock cliff; chiseled square, painted "983" | 981.74 |
| Orange, 3.4 miles east of, south of road, 265 feet north of ridge road and along road up mountain, 0.3 mile east of schoolhouse, in large rock; aluminum tablet stamped "1633" | 1,632.017 |
| Orange, 2.5 miles east of, north of road, 80 feet west of road fork top of mountain, on sandstone outcrop; chiseled square, painted "1563" | 1,562.47 |

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| | Feet. |
|---|---|
| Orange, 1 mile east of, east of road and run, on top of small summit, 0.3 mile west of mountain foot, on outcrop of sand rock; chiseled square, painted "940" | 939.60 |
| Orange, 0.5 mile north of post office, south side of Whiteoak Creek, 300 feet west of mouth of Little Whiteoak Creek, 0.2 mile east of mouth of Whiteoak Creek, in rock cliff; aluminum tablet stamped "734" | 732.963 |
| Orange, 3.2 miles west of, north edge of road, 150 feet west of small hill, 400 feet east of schoolhouse 13, opposite Horse Hollow, in rock cliff; aluminum tablet stamped "735" | 733.697 |
| Orange, 5 miles west of, 20 feet west of road, at bend of river where road comes back to river, on large bowlder; chiseled square, painted "691" | 690.30 |
| Seth post office, 0.3 mile southeast of, north of road, in bank in front of Laurel Church, opposite mouth of Laurel Creek, 0.1 mile northwest of schoolhouse, in outcrop of rock; aluminum tablet stamped "715" | 714.252 |
| Seth, 1.5 miles south of, east of road, west of Laurel Run, opposite hollow, 220 feet east of second house up Laurel Creek, on outcrop of sandstone; chiseled square, painted "689" | 688.57 |
| Nelson, 200 feet southeast of mouth of Hopkins Fork on Laurel Creek, in face of rock cliff; bronze tablet stamped "734–C" | 734.388 |
| Nelson, 300 feet northwest of post office, west of Laurel Creek, 40 feet west of road, 40 feet south of foot log, 370 feet south of road fork and opposite hollow, in outcrop of rock in bank; aluminum tablet stamped "732" | 731.072 |
| Nelson, 2 miles south of, east of log railroad and county road, 0.8 mile south of schoolhouse, 3 feet from ground, in face of rock cliff; aluminum tablet stamped "863" | 862.283 |
| Nelson, 3.9 miles southwest of, north of railroad on Laurel Creek, opposite hollow, 0.2 mile west of Skidway, on rock cliff; chiseled square | 919.26 |
| Nelson, 5.7 miles southwest of, south of Laurel Creek, 300 feet from foot of mountain, 300 feet from house, 5 feet from barn, in bowlder in bank; aluminum tablet stamped "1089" | 1,087.884 |
| Uneeda, 3.3 miles southeast of, north of Robinson Creek, at mouth of hollow, north of house, on outcrop of rock, chiseled square; painted "858" | 857.07 |

**From Brownstown southwest along Lens and Short Creeks to Racine, thence northwest down Coal River to Cobbs.**

| | |
|---|---|
| Hernshaw, 1 mile south of, south side of road, on south bank of Lens Creek, near A. Hoffman's house, in 3 by 5 foot ledge rock; copper bolt stamped "722–C" | 722.185 |
| Peytona, 2 miles northwest of, south side of road down Coal River, 100 feet northwest of Laurel Branch, 1 mile below Whiteoak Branch, in ledge of rock; copper bolt stamped "665–C" | 665.401 |
| Cobbs, 200 feet north of mouth of Lick Creek, west side of Coal River road, in rock; copper bolt stamped "648–C" | 648.375 |

**From Racine southeast to Comfort, thence southwest to Nelson.**

| | |
|---|---|
| Comfort, 0.12 mile north of, 0.5 mile south of mouth of Joes Creek, east of Coal River road, 4 feet above grade, in bottom of rock cliff; copper bolt stamped "673–C" | 673.488 |

**MADISON 15′ (CHARLESTON 30′) QUADRANGLE.**

[Latitude 38°–38° 15′; longitude 81° 45′–82°.]

**From Robinson Creek west via Pond Fork, Little Coal River, Peters Cave Fork, and Sulphur Spring Fork to Griffithsville.**

| | |
|---|---|
| Uneeda, 1.4 miles southeast of, 40 feet north of road, 700 feet east of house, 700 feet east of mouth of Robinson Creek, and back of barn, in outcrop of rock in field; aluminum tablet stamped "751" | 750.085 |

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| | Feet. |
|---|---|
| Uneeda, 0.5 mile southeast of post office, south of road, north of Pond Fork, along narrows, 0.1 mile northeast of hollow, in large rock bowlder; aluminum tablet stamped "723" | 722.284 |
| Uneeda, 0.8 mile west of post office, south of road, north of Pond Fork, 400 feet east of schoolhouse, along narrows, on outcrop of rock; chiseled square, painted "718" | 717.24 |
| Madison, 2 miles southeast of, west of Pond Fork, 220 feet west of road, 0.2 mile south of bend in run, 0.2 mile north of hollow, in rock cliff; aluminum tablet stamped "697" | 696.018 |
| Madison, in west side of foundation of Boone County jail; aluminum tablet stamped "704" | 703.171 |
| Madison, 1.1 miles west of post office, southeast of railroad, 500 feet southwest of milepost 1, on sandstone outcrop; chiseled square | 693.07 |
| Danville, 0.5 mile west of post office, 300 feet west of brickyard, 10 feet west of county road, 10 feet south of railroad, on south abutment of culvert at mouth of John Hill Branch; chiseled square, painted "686" | 684.45 |
| Danville, 1.5 miles west of, 90 feet west of Hopkins station, 500 feet north of milepost 3, between house and railroad, in east end of foundation of Mr. Hopkins's cellar; aluminum tablet stamped "679" | 677.352 |
| Danville, 4.5 miles northwest of, west of railroad, 300 feet west of county road, between houses, in west abutment of culvert; aluminum tablet stamped "666" | 664.334 |
| Danville, 6.5 miles northwest of, east of railroad, 0.2 mile northwest of milepost 8, on rock cliff; chiseled square, painted "669" | 667.98 |
| Hill, 600 feet west of post office, south of railroad, 200 feet west of trestle, 600 feet from road crossing and station, in rock cliff; aluminum tablet stamped "667" | 665.354 |
| Hill, 2 miles northwest of, west of road, near small summit, 500 feet east of house, on sandstone outcrop, chiseled square; painted "658" | 657.22 |
| Woodville, 300 feet east of post office (3 miles west of Hill post office), 170 feet north of mouth of Laurel Fork, west of road, in bowlder; copper bolt stamped "673" | 672.572 |
| Woodville, 2.4 miles west of, 600 feet north of Sulphur Spring Fork at its mouth, east of road and run, in top of bowlder; aluminum tablet stamped "772" | 770.873 |
| Woodville, 3.3 miles northwest of, north of road, 600 feet north of Gum Run, on rock; chiseled square, painted "831" | 829.60 |
| Woodville, 4.2 miles northwest of, north of road, on top of mountain, on rock; chiseled square, painted "1063" | 1,061.77 |
| Woodville, 5.8 miles northwest of, opposite sawmill, 40 feet off road in field, opposite hollow, 300 feet west of house, in outcrop of rock; aluminum tablet stamped "826" | 824.697 |
| Woodville, 7.4 miles northwest of, north of Sugartree Fork, north of road, 300 feet east of house, on outcrop of rock; chiseled square, painted "706" | 704.61 |
| Woodville, 9.1 miles northwest of, at foot of hill, west of road, north of run, on small rock; chiseled square, painted "671" | 670.34 |

**From Garretts Bend south via Sand Gap, Sugarcamp Knob, and Hill post office to Madison.**

| | |
|---|---|
| Sand Gap, 500 feet west of forks of road, in huge rock above John A. Midkiff's house; copper bolt stamped "U. S. G. S. 1079" | 1,078.495 |
| Hill, 3 miles west of, 200 feet above confluence of Laurel Fork and Horse Creek, opposite James McClure's house near last crossing of Laurel, on east bank, in rock ledge; copper bolt stamped "U. S. G. S. 673" | 672.572 |

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| | Feet. |
|---|---|
| Hill, 2 miles north of post office, 1 mile above mouth of Trace Branch, on left side of right-hand hollow on Trace Branch of Horse Creek; copper bolt stamped "U. S. G. S. 766" | 765.881 |
| Hill, 3 miles southeast of, 0.25 mile north of Camp Creek, on east side of road up Little Coal river, 300 feet above B. Stolling's, in small ledge of rock; copper bolt stamped "U. S. G. S. 660" | 660.120 |

**Single-spur line up Lick Creek.**

| | |
|---|---|
| Danville, 4 miles west of, on right fork of Lick Creek, 25 feet east of creek, between two walnut trees, one of which is blazed, in bowlder above coal bank; copper bolt stamped "U. S. G. S. 820" | 819.353 |

**Steubenville and Wellsville quadrangles.**

**BROOKE AND HANCOCK COUNTIES.**

Leveling in Wellsville quadrangle in 1902 by A. T. Bagley and in Steubenville quadrangle in 1902 by J. A. Buford.

**WELLSVILLE QUADRANGLE.**

[Latitude 40° 30′–40° 45′; longitude 80° 30′–80° 45′.]

**From East Liverpool, Ohio, south to Fairview.**

| | Feet. |
|---|---|
| Chester, 2 miles south of, 0.25 mile east of Locust Grove Cemetery, Allison triangulation station; bronze tablet in top of marble post, stamped "1337 Stbnvl" | 1,337.106 |

**From New Cumberland northeast along road to Fairview, thence east to Kendall, Pa.**

| | |
|---|---|
| Fairview, on the north side of Tri-State Normal School, at base of stone frame to front door; aluminum tablet stamped "1196 Stbnvl" | 1,195.548 |

**STEUBENVILLE QUADRANGLE.**

[Latitude 40° 15′–40° 30′; longitude 80° 30′–80° 45′.]

**From Wellsburg north to Cross Creek, thence east up same about 5 miles, thence north to Colliers, thence northwest to Hollidays Cove, thence southwest to Steubenville, Ohio.**

| | |
|---|---|
| Rockdale, 0.2 mile west of, southeast corner of bridge over Cross Creek, opposite Wabash concrete bridge, in stone abutment; chiseled cross | 672.288 |
| Colliers station, at northwest corner of bridge, in stone abutment; aluminum tablet stamped "824 Stbnvl" | 823.477 |
| Hollidays Cove, 0.5 mile east of, Pittsburgh, Cincinnati, Chicago & St. Louis Ry. bridge 39, in coping stone at southwest corner; chiseled square. | 741.78 |

**From Hollidays Cove north to New Cumberland.**

| | |
|---|---|
| Zalia (Penrith), 100 feet south of church, on east side of road, opposite lower end of Toronto Street at Ferry, in big bowlder; bronze tablet stamped "704 Stbnvl" | 703.630 |
| New Cumberland, southwest corner of D. S. Schiller Foundry Co.'s works, Front and Ferry streets, in west end of door stoop; chiseled square (U. S. Engineer Corps bench mark 56 A) | 670.57 |

**From New Cumberland east to Comettsburg, Pa.; thence southwest to Hollidays Cove.**

| | |
|---|---|
| New Cumberland, 3.25 miles east of; at northeast corner of bridge; T cut in stone | 935.05 |

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**From schoolhouse on Cross Creek southeast to Independence, Pa.; thence west to Wellsburg.**

| | Feet. |
|---|---|
| Rockdale, 2.5 miles east of, at schoolhouse, covered bridge on Parmar Run near junction with Cross Creek, in southwest corner of abutment; chiseled cross | 754.21 |
| Wellsburg, 1 mile east of; stone horse block in front of Jacob's house; aluminum tablet stamped "1001 Stbnvl" | 1,000.795 |

**Cameron, New Martinsville, and Wheeling quadrangles.**

**BROOKE, MARSHALL, OHIO, TYLER, AND WETZEL COUNTIES.**

Leveling in Wheeling quadrangle in 1901 by W. A. Freret, jr.; in Cameron quadrangle in 1902 by G. L. Gordon; and in New Martinsville quadrangle in 1903 by R. E. McFadden and in 1904 by G. L. Gordon.

**WHEELING QUADRANGLE.**

[Latitude 40°–40° 15′; longitude 80° 30′–80° 15′.]

**From Wheeling east along National Pike via Elm Grove to Triadelphia.**

| | Feet. |
|---|---|
| Wheeling, north front of city building, 37 feet east of northwest corner; chiseled square (U. S. Engineer Corps bench mark 90–A) | 678.070 |
| Wheeling, 1.1 miles east of post office, Baker Street Bridge on Wheeling Creek, on southwest corner of coping stone at southeast end of bridge; chisel mark | 651.05 |
| Elm Grove, 1 mile southeast of, bridge over Little Wheeling Creek near its junction with Wheeling Creek, on top of west coping wall, in third stone from center; cut | 694.57 |
| Triadelphia, M. E. Church brick building, in foundation stone of south face, at southwest corner; aluminum tablet stamped "745 Grafton" | 744.390 |

**From Triadelphia southeast along highways, up Middle Wheeling Creek, and north to Valley Grove.**

| | |
|---|---|
| Twilight, 0.6 mile west of, northeast abutment of bridge over Wagners Run, northeast corner of stone; chisel mark | 801.85 |
| Twilight, 3.1 miles northeast of, near junction of Haneytown pike and Middle Wheeling Creek road, bridge over Middle Wheeling Creek, northeast wing retaining wall, corner of fourth stone from top; chisel mark | 949.61 |
| Valley Grove, Baltimore & Ohio R. R. (Pittsburgh division), bridge 174, in north face of south pier; bronze tablet stamped "953 Grafton" | 952.468 |

**From Valley Grove along National Pike and north up McGraw Run to Bethany.**

| | |
|---|---|
| Bethany, 5.1 miles south of, southeast abutment wall of wooden bridge over Longs Run, on southeast corner of third stone from top; chisel mark | 1,020.69 |
| Bethany, 2 miles south of, at northeast corner of M. E. Church, on top stone at southeast stone step; chisel mark | 954.24 |
| Bethany, 0.3 mile west of, in front face of Bethany College, north side of first entrance west of main entrance, east face of stone water table; aluminum tablet stamped "932 Grafton 1901" | 931.594 |

**From Bethany along Pike to Short Creek.**

| | |
|---|---|
| Bethany, 2.6 miles west of, west end of bridge over Buffalo Creek, on northeast corner of top stone of north wing wall; chisel mark | 743.66 |



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| | Feet. |
|---|---|
| Short Creek, brick store and post office, in west face, 25 feet from southwest corner and 2 feet above ground; aluminum tablet stamped "668 Grafton 1901" | 667.803 |
| Short Creek, 0.1 mile south of, west side of railroad track, Pittsburgh, Cincinnati, Chicago & St. Louis Ry. bridge 12 over Short Creek, on top of south abutment; chiseled square, marked "U. S. B. M. " (U. S. Engineer Corps bench mark 81 A) | 652.564 |

## CAMERON QUADRANGLE.

[Latitude 39° 45′–40°; longitude 80° 30′–80° 45′.]

**From Moundsville east along public roads via Limestone and Beula station to Rocklick.**

| | |
|---|---|
| Moundsville, Marshall County courthouse, in front of building, 17.2 feet east of center of doorway; on top of water table of foundation (U. S. Engineer Corps bench mark 101–B) | 690.317 |
| Limestone, brick dwelling of R. H. Peters, in top stone of foundation of front, 2.7 feet northwest of center of door; bronze tablet stamped "1377 Grafton" | 1,376.584 |
| Pleasant Valley, 0.4 mile southeast of, brick dwelling of J. W. Cunningham, on top of stone at front gate; chiseled square | 1,316.83 |
| Beelers station, on northeast corner of first step above stone platform; chiseled square | 1,356.30 |

**From Rocklick south along public roads and Baltimore & Ohio R. R. via Cameron and Woodruff to Belton.**

| | |
|---|---|
| Rocklick, 0.3 mile south of, south side of southeast corner of schoolhouse, in second stone; aluminum tablet stamped "1464 Grafton" | 1,463.505 |
| Cameron, 1.8 miles northeast of, M. E. Church at northeast angle of crossroads, on top at south end of retaining wall; chiseled square | 1,074.49 |
| Cameron, west end of brick public school building, 0.9 foot north of southwest corner, in water table; bronze tablet stamped "1170 Grafton" | 1,169.564 |
| Woodruff, 0.7 mile northwest of, west end of stone culvert, center of top; chiseled square | 1,015.66 |

**From Belton west along public roads via Aldine to Lynn Camp.**

| | |
|---|---|
| Kausooth post office, 2.4 miles west of, on top of west abutment of bridge over Big Run, 12.5 feet right of center of bridge; chiseled square | 768.08 |

**From Lynn Camp northwest along public roads and Baltimore & Ohio R. R. via Meighen and Rosbys Rock to Moundsville.**

| | |
|---|---|
| Meighen, at schoolhouse No. 5, east side, 8 feet from southeast corner, in top stone of foundation; bronze tablet stamped "691 Grafton" | 690.367 |
| Rosbys Rock, northeast abutment of iron bridge over Grave Creek, 12 feet southeast of center of bridge, 1 foot below bridge seat; bronze tablet stamped "779 Grafton" | 778.066 |
| Rosbys Rock, 4 miles northwest of, on top of northwest corner of south abutment of railroad bridge 146 over Grave Creek; chiseled square | 680.494 |
| Moundsville, Marshall County courthouse, south front of, 17.2 feet east of center of doorway; bronze tablet stamped "690 Grafton" | 689.094 |

**From Lone Oak schoolhouse north along public roads to Hazeldell schoolhouse (single spur line).**

| | |
|---|---|
| Hazeldell or Irish Ridge schoolhouse, center of southwest corner stone; bronze tablet stamped "1322 Grafton" | 1,321.322 |

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### NEW MARTINSVILLE QUADRANGLE.

[Latitude 39° 30′–39° 45′; longitude 80° 45′–81°.]

**From Proctor southeast along highways to Halls Mills.**

| | Feet. |
|---|---|
| Proctor, Baltimore & Ohio R. R. bridge 317 over Proctor Creek, in west end south abutment; bronze tablet stamped "632 Grafton 1902" | 631.924 |
| Marion, 0.2 mile east of post office, opposite Marion Moore's store building, south of creek, on stone; chiseled square | 881.43 |

**From New Martinsville southwest along east side of Ohio River to Sistersville, thence southeast to Middlebourne.**

| | |
|---|---|
| New Martinsville, in county courthouse, facing Main Street, near Main Street entrance; bronze tablet stamped "630 Grafton 1903" | 630.092 |
| Lively crossing; top of rail at flag station | 630 |
| Mendota; top of rail at flag station | 628 |
| Paden, in front of station; top of rail | 630 |
| Stewarts crossing, in front of station; top of rail | 633 |
| Sistersville, in city hall, in sill on south side; bronze tablet stamped "649 Stbnvl" | 648.416 |
| Luzon, iron bridge over Pursley Creek, at foot of hill, on top stone of southeast foundation; circle | 736.78 |
| Luzon, 0.5 mile southeast of, east side of road, opposite Kellar's old store building, on stone; square | 1,055.22 |
| Luzon, 2.5 miles southeast of, on northeast abutment of iron bridge over Point Pleasant Creek near where it empties into Middle Island Creek, on top stone; chiseled square | 684.34 |

**From Middlebourne northeast along highway to Polard, thence east to Conaway, thence northeast to Reader, thence northwest along Baltimore & Ohio R. R. (short line) to New Martinsville.**

| | |
|---|---|
| Polard, 0.5 mile northeast of post office, on rock north of road near Elk Creek; chiseled square | 745.21 |
| Conaway, in southeast corner of James W. Mayfield's cellar, facing post office; aluminum tablet stamped "840 Grafton" 1903 | 840.753 |
| Reader, 2 miles northwest of, on southwest abutment of large railway bridge 121 over Fishing Creek; chiseled square | 680.45 |
| Flannagan, in front of flag station; top of rail | 678 |
| Reader, 3 miles northwest of, on southwest abutment of bridge 110, over Fishing Creek; chiseled square | 676 |
| Porter Falls, 0.6 mile northwest of, on southeast abutment of small bridge; chiseled square | 670.39 |
| Minnie, in front of flag station; top of rail | 647.2 |
| Minnie, 360 feet west of flag station, on southwest abutment of railway bridge 74; chiseled square | 646.06 |
| Bard, in front of telegraph office; top of rail | 641.2 |
| Minnie, 6 miles northwest of, on north end of small railway culvert over Bank Run; chiseled square | 621.04 |

### Belleville, Marietta, Parkersburg, and St. Marys quadrangles.

#### JACKSON, PLEASANTS, RITCHIE, AND WOOD COUNTIES.

Leveling in St. Marys quadrangle in 1903 by R. E. McFadden, and in 1904 by G. L. Gordon; in Marietta and Parkersburg quadrangles in 1902, and in Belleville quadrangle in 1903, by J. W. Hodges.

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## ST. MARYS QUADRANGLE.

[Latitude 39° 15′–39° 30′; longitude 81°–81° 15′.]

### From Little southwest along highway to Union Mills, thence south to Ellenboro.

| | Feet. |
|---|---|
| Union Mills, 0.4 mile southeast of mouth of McKim Creek, 100 feet north of Charles Little's blacksmith shop, in top of north end of east abutment of iron bridge; bronze tablet stamped "614 Grafton 1903" | 614. 657 |
| Adlai, 135 feet east of road, 75 feet south of J. H. Fleming's house, in rock; bronze tablet stamped "777 Grafton 1903" | 777. 070 |

### From tunnel 9 west along Baltimore & Ohio R. R. to tunnel 10.

| | |
|---|---|
| Ellenboro, 1.8 miles east of, on south end of east abutment of railroad bridge 27; chiseled square | 807. 40 |
| Ellenboro, road crossing at station; top of rail | 784 |
| Ellenboro, 150 feet west of station, in east abutment of south end of bridge over small stream from north; bronze tablet stamped "780 Grafton 1903" | 779. 835 |
| Tunnel 10, 1 mile east of, on top of stone, south end east abutment of bridge 28; chiseled square | 760. 37 |

### From Ravenrock southwest along Ohio River R. R. to French Creek.

| | |
|---|---|
| Ravenrock, 200 feet southeast of station, northeast side of large rock above a spring; aluminum tablet stamped "647 Adj 1903" | 646. 791 |
| Ravenrock, in front of station; top of rail | 623. 0 |
| Spring Run, in front of station; top of rail | 621. 2 |
| Grape Island, railroad crossing at station; top of rail | 621. 6 |
| St. Marys, 0.76 mile northeast of, on southeast end of southwest abutment of railroad bridge over Middle Island Creek; chiseled square | 621. 00 |
| St. Marys, corner of Second and Washington streets, First National Bank Building, facing Second Street, 1.1 feet from southwest corner of building and 4.5 feet above street; aluminum tablet stamped "628 Adj 1903" | 627. 907 |
| St. Marys, on water table of post-office building, south of entrance facing Main Street; chiseled square | 624. 10 |
| Vancluse, in front of station; top of rail | 626 |

### From Union Mills west along highways to St. Marys.

| | |
|---|---|
| Union Mills, 2.05 miles west of, on north end pier of iron bridge over Willow Island Creek; chiseled square | 610. 67 |
| Union Mills, 3.6 miles west of (1.7 miles east of St. Marys), in north end of east abutment of iron bridge over Broad Run; bronze tablet stamped "608 Adj 1903" | 607. 985 |

### From Nutters Farm north along highway 6 miles to mouth of Douglas Run (checked spur line).

| | |
|---|---|
| Goose Creek, 3 miles southwest of, 3 miles north of Nutters Farm, northwest side of road and Goose Creek, in shelf in rock outcrop; bronze tablet stamped "761 Adj 1903" | 760. 670 |
| Goose Creek, 0.4 mile west of, southeast bank of Goose Creek, 0.2 mile northeast of junction of road down Douglas Run and 320 feet southeast of road, in face of rocky cliff; bronze tablet stamped "808 Adj 1903" | 807. 572 |

## PARKERSBURG QUADRANGLE.

[Latitude 39° 15′–39° 30′; longitude 81° 30′–81° 45′.]

### From Parkersburg east along highway to Tallyho.

| | |
|---|---|
| Parkersburg, corner of Fifth and Julian streets, at southeast corner of customhouse and post office, on top of foundation water table; chiseled square marked U. S. □ B. M. (U. S. Engineer Corps bench mark 183–A) | 615. 639 |

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| | Feet. |
|---|---|
| Parkersburg, customhouse and post office, on south side near west end in water table; bronze tablet stamped "616 Grafton 1902" | 615.043 |
| Parkersburg, 3.2 miles east of, on south side of pike, on south foundation of small bridge; chiseled square | 602.24 |

**From Pohick south along Ohio River R. R. to Parkersburg.**

| | |
|---|---|
| Kellar, in front of station; top of rail | 613 |
| Briscoe station, opposite highway to post office, in face of rock ledge facing Ohio River; bronze tablet stamped "594 Grafton 1902" | 593.472 |

**MARIETTA QUADRANGLE.**

[Latitude 39° 15′–39° 30′; longitude 81° 15′–81° 30′.]

**From Tallyho east along highway to Deerwalk, thence north to Willow, thence northeast along railroad to French Creek.**

| | |
|---|---|
| Tallyho, 1.5 miles southeast of, opposite Shiloh United Brethren Church, at forks of road, in large bowlder; aluminum tablet stamped "714 Grafton 1902" | 713.370 |
| Borland, 100 feet east of post office, on south side of Bull Creek; bronze tablet stamped "683 Grafton 1902" | 682.538 |
| Belmont, 0.5 mile northeast of, on top of south abutment west end of railway bridge 66 over French Creek; chiseled square | 614.09 |

**From Willow west along Ohio River R. R. to Williamstown, thence south along same to Pohick.**

| | |
|---|---|
| Willow Island station, in northeast corner of foundation wall of Jos. I. Norris's dwelling; aluminum tablet stamped "616 Grafton 1901" | 615.258 |
| Compton, in front of station; top of rail | 615 |
| Williamstown, in front of station; top of rail | 610 |
| Pohick, in front of station; top of rail | 616 |

**BELLEVILLE QUADRANGLE.**

[Latitude 39°–39° 15′; longitude 81° 30′–81° 45′.]

**From Parkersburg south along highway via Newport and Mineral Wells to Rockport.**

| | |
|---|---|
| Mineral Wells, 1.2 miles southwest of, in face of abutment of small iron bridge over Badgley Fork, northwest end; aluminum tablet stamped "593 Grafton 1903" | 593.219 |
| Fountain Spring, north abutment of iron bridge over Tygart Creek, on top; chiseled square | 622.15 |
| Saulsbury, 1.2 miles south of, east of road, on northeast end of Valley Belle schoolhouse, on top of corner stone; chiseled square | 653.57 |
| Rockport, opposite schoolhouse No. 2, at forks of road, on top of large rock; aluminum tablet stamped "700 Grafton 1903" | 700.307 |

**From Rockport west along highway to Belleville.**

| | |
|---|---|
| Sloan, 0.2 mile west of, on rock north of road; chiseled square | 726.71 |
| Oak, 0.8 mile west of, on stone of small culvert on north side of road; chiseled square | 619.56 |
| Belleville, 0.8 mile south of, 0.2 mile south of road crossing, in small ravine east of track, in top of rock; aluminum tablet stamped "595 Grafton 1903" | 594.992 |
| Pond Creek, 1,200 feet north of, on northwest corner of capstone of culvert (U. S. Engineer Corps bench mark 204–A) | 599.050 |

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**At New England (set from U. S. Engineer Corps b. m. 195-A).**

| | Feet. |
|---|---|
| New England, 0.5 mile west of Baltimore & Ohio R. R. station, on west abutment of railroad culvert over Beadle Run, 7 feet north of south end of culvert, 1,200 feet above Mushapha Island, 23 feet west of center of railway, and 0.008 foot higher than adjoining army engineers' bench mark; aluminum tablet stamped "591 Grafton 1903" | 590.529 |

**From Rockport south along highway to Wiseburg.**

| | |
|---|---|
| Rockport, 1 mile south of, on southwest abutment of small bridge over Tygart Creek, chiseled square | 761.40 |
| Rockport, 6 miles south of, on Sandy Creek, 240 feet north of old Wiseburg post office, north side of road, in top of rock; aluminum tablet stamped "663 Grafton 1903" | 662.721 |

## Glenwood, Keno, Point Pleasant, and Ravenswood quadrangles.

### CABELL, JACKSON, MASON, AND PUTNAM COUNTIES.

Leveling in Keno quadrangle in 1904 by F. W. Hughes; and in Glenwood, Point Pleasant, and Ravenswood quadrangles in 1905, by G. L. Gordon.

### KENO QUADRANGLE.

[Latitude 39°-39° 15′; longitude 81° 45′-82°.]

**Set from United States Engineer Corps bench mark 211-A.**

| | Feet. |
|---|---|
| Brewster (formerly Williams), 450 feet north of station, in top of Baltimore & Ohio R. R. culvert over Williams Run, 28 feet west of center of track; 7 feet south of northwest corner of culvert; aluminum tablet stamped "589 Adj 1903" | 581.167 |

### POINT PLEASANT QUADRANGLE.

[Latitude 38° 45′-39°; longitude 82°-82° 15′.]

**From Gallipolis, Ohio, crossing by reciprocal readings to West Virginia, thence north along railroad to West Columbia.**

| | |
|---|---|
| Gallipolis Ferry, 1 mile south of Baltimore & Ohio R. R. station, in top at southwest corner of open culvert; aluminum tablet stamped "582 Adj 1903" | 581.625 |

**From Point Pleasant north along Baltimore & Ohio R. R. to West Columbia, thence east along public highway to Locust Grove schoolhouse.**

| | |
|---|---|
| Point Pleasant, highway on top of stone foundation northwest corner of Mason County courthouse; chiseled square and letters U. S. B. M. (army engineers' bench mark 264-A) | 568.913 |
| Point Pleasant, west side of "Cornstalk Monument" in Mason County courthouse yard; bronze tablet stamped "570-A" | 569.295 |
| Point Pleasant, Lock 11; zero of gage | 513.80 |
| Linn (York station), Mr. Hogg's brick house, at northwest corner of top stone of foundation, northwest face; bronze tablet stamped "586 Adj 1903" | 585.944 |
| Maggie, railroad bridge over small run, west end of south abutment; bronze tablet stamped "569 Adj 1903" | 568.594 |
| Spilman, 0.2 mile east of, south of track, in south face of outcrop of rock; bronze tablet stamped "576 Adj 1903" | 575.858 |

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| | Feet. |
|---|---|
| West Columbia, 2.4 miles east of, on left side of Tenmile Creek, opposite Locust Grove schoolhouse, in shelf of rock cliff; bronze tablet stamped "603 Adj 1903" | 603.256 |

**From Debby northwest along Kanawha & Michigan R. R. to Point Pleasant.**

| | |
|---|---|
| Ambrosia, road crossing; top of rail | 566.5 |
| Ambrosia, 0.1 mile north of, east of road, 30 feet south of end of covered bridge over Rockcastle Creek, in shelf of rock; bronze tablet stamped "577 Adj 1903" | 576.662 |
| Ambrosia, 2.5 miles northwest of, iron bridge over Threemile Creek, southeast pier, south corner of bridge seat; bronze tablet stamped "554 Adj 1903" | 553.515 |

## GLENWOOD QUADRANGLE.

[Latitude 38° 30′–38° 45′; longitude 82°–82° 15′.]

**From Elwell south along Baltimore & Ohio R. R. to Glenwood.**

| | |
|---|---|
| Elwell, road crossing; top of rail | 560.1 |
| Ben Lomond, road crossing; top of rail | 559.1 |
| Ben Lomond, 0.2 mile south of, railroad bridge 1841, north abutment, east of track; aluminum tablet stamped "557 Adj 1903" | 557.115 |
| Apple Grove station, 570 feet north of, top of west end of railroad culvert; aluminum tablet stamped "579 Adj 1903" | 578.734 |
| Apple Grove, road crossing; top of rail | 578.0 |
| Ashton, road crossing; top of rail | 561.8 |
| Ashton, 0.86 mile south of, 150 feet northeast of trestle over Eighteenmile Creek, 10 feet east of track, in top of squared stone foundation of water tank; aluminum tablet stamped "561 Adj 1903" | 560.941 |
| Glenwood, 2,250 feet north of upper landing, 236 feet south of United States post light at foot of straight ripple, 125 feet north of mouth of Gwyno Run, on 15 by 10 bowlder 4 feet high; chiseled square (army engineers' bench mark 284–A) | 517.674 |
| Glenwood, road crossing; top of rail | 558.7 |
| Glenwood, bridge over small run, southwest abutment, north end of bridge seat; aluminum tablet stamped "544 Adj 1903" | 543.652 |

**From Glenwood south along highway to Swann, thence northeast to Albatross, thence north to Debby.**

| | |
|---|---|
| Glenwood, 2.84 miles south of, east of road, in face of rock outcrop; aluminum tablet stamped "592 Adj 1903" | 591.824 |
| Glenwood, 5.9 miles south of, west of road, in face of rocky cliff; aluminum tablet stamped "587 Adj 1903" | 586.909 |
| Swann, 0.1 mile north of, near church at northeast angle of forks of roads, under chestnut tree, on top of large stone; chiseled square | 830.038 |
| Swann, 2.3 miles northeast of, north of road, in face of rock ledge; aluminum tablet stamped "577 Adj 1903" | 576.945 |
| Bryan, 0.6 mile northeast of, north of road, east end of face of rock cliff; aluminum tablet stamped "837 Adj 1903" | 837.052 |
| Ellen, 2.1 miles east of, northwest of road, in shelf of outcrop of rock; aluminum tablet stamped "638 Adj 1903" | 637.921 |
| Albatross, 0.08 mile northeast of, between road and run, in top of large rock; aluminum tablet stamped "701 Adj 1903" | 700.968 |
| Albatross, 2.5 miles northeast of, Riverview schoolhouse, north corner stone, center of northeast face; aluminum tablet stamped "936 Adj 1903" | 936.006 |

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| | Feet. |
|---|---|
| Albatross, 6.7 miles north of, 300 feet northeast of saddle of ridge, west of road, in face of outcrop of rock; aluminum tablet stamped "846 Adj 1903" | 846.005 |
| Siloam, 1.7 miles northeast of, bend of road to right on east side, in top of large stone; aluminum tablet stamped "660 Adj 1903" | 659.914 |
| Flaxton, 0.11 mile north of, east of road, in shelf of outcrop of rock; aluminum tablet stamped "856 Adj 1903" | 855.992 |
| Flaxton, 2 miles north of, north of road and creek at crossing of upper Ninemile Creek, in outcrop of rock; aluminum tablet stamped "638 Adj 1903" | 638.235 |

**RAVENSWOOD QUADRANGLE.**

[Latitude 38° 45′–39°; longitude 81° 45′–82°.]

**At Sherman.**

| | |
|---|---|
| Sherman, near Baltimore & Ohio R. R. station, on northwest pier of railroad bridge over Little Sandy Creek; chiseled square (U. S. Engineer Corps bench mark 216–A) | 587.653 |
| Sherman, 150 feet south of station, in north pier of railroad bridge, northeast corner of coping; aluminum tablet stamped "589 Adj 1903" | 588.511 |

**At Ravenswood.**

| | |
|---|---|
| Ravenswood, top of northwest corner of north pier of Baltimore & Ohio R. R. bridge 128.4 over Sandy Creek; chiseled square (U. S. Engineer Corps bench mark 219–A) | 585.447 |

**From Millwood along Baltimore & Ohio R. R. to Graham station, thence west along highways to Locust Grove schoolhouse.**

| | |
|---|---|
| Millwood, on northeast corner of capstone of east pier of railroad bridge over Little Mill Creek, 9.5 feet west of center of track, 1 foot south by 1 foot east of northeast corner of pier; chiseled square, marked "U. S. B. M." (U. S. Engineer Corps bench mark 230–A) | 577.709 |
| Millwood, east pier of railroad bridge at south end; bronze tablet stamped "572" | 571.362 |
| Letart, 0.9 mile southeast of, county bridge over Tombleson Run, in east end of northwest pier; bronze tablet stamped "569 Adj 1903" | 569.345 |
| Letart, in front of station; top of rail | 580.4 |
| Graham station, 4.13 miles south of, dwelling east of highway, 15 feet west of track, in shelf of outcrop of rock; bronze tablet stamped "581 Adj 1903" | 581.048 |
| Graham station, road crossing; top of rail | 579.2 |
| Graham, 0.4 mile west of, south of road, northeast of John Spencer's house, in shelf of rock; bronze tablet stamped "651 Adj 1903" | 650.849 |
| Graham, 3.3 miles west of, west side of Union Church, 8 feet north of southwest corner, in stone foundation; bronze tablet stamped "681 Adj 1903" | 681.017 |

**From Millwood southeast along railroad up Mill Creek to Evans.**

| | |
|---|---|
| Angerona, 2.95 miles northwest of, south of track, 30 feet east of trestle over small run, in shelf of outcrop of rock; aluminum tablet stamped "589 Adj 1903" | 588.440 |
| Angerona, road crossing near station; top of rail | 583 |
| Evans, 1.1 miles west of, at two schoolhouses, northeast corner stone of schoolhouse nearest track, in north face; bronze tablet stamped "642 Adj 1903" | 641.428 |
| Evans, in front of station; top of rail | 606.4 |

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**From Evans west along highway to Rollins, thence south to Leon, thence west to Debby.**

| | Feet. |
|---|---|
| Evans, 2.4 miles southwest of, in southeast angle of forks of roads; iron post stamped "930 Adj 1903" | 929.805 |
| Evans, 5.6 miles southwest of, west of road, at foot of steep grade, in top of low outcrop of rock; bronze tablet stamped "921 Adj 1903" | 920.647 |
| Baden, 0.09 mile northeast of, northwest of road, in outcrop of rock; bronze tablet stamped "968 Adj 1905" | 967.617 |
| Rollins, triangle at crossroads at run, in top of long stone planted 3 feet in ground; bronze tablet stamped "626 Adj 1903" | 625.638 |
| Rollins, 3.3 miles south of, 0.2 mile north of road forks, northwest of road, south end of ledge of rock in top; bronze tablet stamped "665 Adj 1903" | 664.750 |
| Leon, bridge over Thirteenmile Creek near mouth, north abutment, in west end of bridge seat; bronze tablet stamped "559 Adj 1903" | 558.743 |
| Debby post office, near Beech Hill station, railroad crossing; top of rail | 567 |
| Beech Hill, in front of station, opposite side of track, in west face of outcrop of rock; aluminum tablet stamped "572 Adj 1903" | 571.408 |

**Ceredo, Guyandot, and Milton 15′ (Huntington and Kenova 30′) quadrangles.**

**CABELL, LINCOLN, PUTNAM, AND WAYNE COUNTIES.**

Leveling in 1901 in Ceredo, Guyandot, and Milton quadrangles, by J. W. Hodges, and in the Guyandot and Milton quadrangles in 1907, by E. S. Dawson.

**CEREDO 15′ (KENOVA 30′) QUADRANGLE.**

[Latitude 38° 15′–38° 30′; longitude 82° 30′–82° 45′.]

**From Kenova east along Chesapeake & Ohio R. R. to Central City.**

| | Feet. |
|---|---|
| Kenova, Union Station, in west side of doorsill of men's entrance to waiting room; aluminum tablet stamped "567 K" | 566.818 |
| Ceredo, in front of station; top of rail | 553.5 |
| Kellogg, in front of station; top of rail | 553 |
| Kellogg, 1.3 miles east of, south of track, on small culvert; chiseled square. | 564.49 |

**From Ceredo southeast along Norfolk & Western Ry. to Shoals.**

| | |
|---|---|
| Ceredo, at road crossing near station; top of rail | 569 |
| Buffalo station, 7 feet from track, in southwest abutment of bridge over Buffalo Creek; aluminum tablet stamped "565 Grafton" | 562.355 |
| Buffalo, in front of station; top of rail | 563 |

**GUYANDOT 15′ (HUNTINGTON 30′) QUADRANGLE.**

[Latitude 38° 15′–38° 30′; longitude 82° 15′–82° 30′.]

**From Central City east along Chesapeake & Ohio Ry. to Barboursville.**

| | |
|---|---|
| Central City, in front of station; top of south rail of south track | 549 |
| Huntington, in front of station; top of rail | 565 |
| Huntington, southeast corner of Tenth Street and Second Avenue, between Chesapeake & Ohio and Baltimore & Ohio railroads, brick building occupied in 1899 by Sehon, Blake & Stevenson, wholesale grocery company, in west face of stone foundation, 18.8 feet south of west corner and 1.5 feet below floor (U. S. Engineer Corps bench mark 307–A) | 547.355 |
| Huntington, courthouse at corner of Fourth Avenue and Eighth Street, in north corner of northeast entrance; aluminum tablet stamped "566 Grafton" | 563.725 |

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| | Feet. |
|---|---|
| Wilson, at road crossing; top of rail | 556 |
| Barboursville, 0.5 mile north of, 3.1 miles east of Wilson station, in southeast abutment of railway bridge over Mud River; aluminum tablet stamped "572 Adj 1903" (established as a substitute for bench mark destroyed in reconstruction of bridge) | 571.650 |

**From Shoals south along Norfolk & Western Ry. to Wayne.**

| | |
|---|---|
| Shoals station, at road crossing; top of rail | 572 |
| Lavalette, in front of station; top of west rail | 565 |
| Dickson, opposite mail crane at station; top of rail | 581 |
| Ardel (Herbert), opposite mail crane at station; top of rail | 588 |
| Ardel (Herbert post office), across Twelvepole Creek, opposite M. E. parsonage, west of public highway, in large bowlder; bronze tablet stamped "591 Grafton" | 588.485 |
| Craig, in front of station; top of rail | 597 |
| Wayne, 1 mile north of, on coping stone at northeast corner of culvert; chiseled square | 588.80 |

**From Shoals northeast to Hodges.**

| | |
|---|---|
| Hodges, 125 feet north of road, opposite John Hodges's dwelling, on east of road leading to Huntington, in small bowlder; aluminum tablet stamped "710 Grafton" | 708.084 |

**From Herbert northeast along road to Sarah, thence north to Barboursville.**

| | |
|---|---|
| Bowen, 3.8 miles southwest of, on Booten Branch, 0.5 mile east of junction with Millers Fork, south of road, in bowlder; bronze tablet stamped "623 Grafton" | 620.675 |
| Poppa (Winslow), west of road nearly opposite post office, in top of large bowlder; aluminum tablet stamped "612 Grafton" | 609.484 |
| Martha, northeast abutment of highway bridge over Guyandot River, in top stone; bronze tablet stamped "563 Grafton" | 561.090 |

**From Poppa south to point near Bartram.**

| | |
|---|---|
| Bartram, 0.2 mile south of post office, at mouth of small run, near store, in southeast corner of foundation of old barn of W. E. Adkins; aluminum tablet stamped "643" | 642.167 |

**MILTON 15′ (HUNTINGTON 30′) QUADRANGLE.**

[Latitude 38° 15′–38° 30′; longitude 82°–82° 15′.]

**From Barboursville east along Chesapeake & Ohio Ry. to Hurricane, thence along highway to Young's store.**

| | |
|---|---|
| Ona, in W. T. Sanford's dwelling, in third stone from ground at northeast corner of foundation; bronze tablet stamped "634 Grafton" | 631.877 |
| Ona, at road crossing; top of rail | 633 |
| Milton, corner of railroad and Pike street, at southeast corner of street, in foundation stone of J. S. Kane's vacant store building; bronze tablet stamped "585 Grafton" | 583.146 |
| Milton, at road crossing; top of rail | 585 |
| Walton, opposite switch; top of rail | 623 |
| Hurricane, 0.1 mile west of station, opposite small highway bridge, north of track, in top stone of culvert; bronze tablet stamped "669 Grafton" | 666.608 |

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**From Hamlin southeast along public highways to Griffithsville.**

| | Feet. |
|---|---|
| Sweetland, 0.2 mile east of post office, 200 feet north of Middle Fork, north of road in bend, in rock bowlder; aluminum tablet stamped "657"..... | 658.149 |

**From Salt Rock south along highways to West Hamlin.**

| | |
|---|---|
| West Hamlin, 300 feet east of station, in steps at northwest corner of Baptist Church; aluminum tablet stamped "595"..... | 595.005 |

**From Ona south via Fudges and Cavill creeks to Guyandot River at Roach (single spur line).**

| | |
|---|---|
| Fudges (5 miles south of Ona), in stone chimney two stones above ground; bronze tablet stamped "736 Grafton"..... | 733.280 |

**From Hurricane south to Nye, thence southwest to Hamlin, thence northwest to Sarah.**

| | |
|---|---|
| Nye, in top stone of northwest pier of county bridge over Trace Fork of Mud River; bronze tablet stamped "625 Grafton"..... | 623.388 |
| Hamlin, in third stone from top in northeast end of abutment wall of bridge over Mud River; bronze tablet stamped "645 Grafton"..... | 642.436 |
| Salt Rock, in third stone from top in northeast end of retaining wall of highway bridge over Guyandot River; bronze tablet stamped "586 Grafton"..... | 583.456 |

**Midkiff and Wayne 15′ quadrangles (Huntington 30′ quadrangle).**

**LINCOLN AND WAYNE COUNTIES.**

This work extends south from several bench marks in Guyandot and Milton quadrangles. The closure errors were somewhat excessive.

The leveling was done in 1907 by E. S. Dawson.

**WAYNE 15′ (HUNTINGTON 30′) QUADRANGLE.**

[Latitude 38°–38° 15′; longitude 82° 15′–82° 30′.]

**From Herbert south along Norfolk & Western Ry. to Preston, thence northeast along public highways to Cover Gap, thence north along public highways to a point 7 miles north of Nestlow.**

| | Feet. |
|---|---|
| Herbert, 2.2 miles south of, 450 feet south of road crossing, west of railroad and road, on rock in bank; chiseled square..... | 596.66 |
| Wayne, 3 feet north of main door in east side of Wayne County courthouse; aluminum tablet stamped "707"..... | 706.539 |
| Wayne, 3.4 miles south of, 70 feet south of railroad crossing, in northwest abutment of railroad bridge over Patrick Creek; aluminum tablet stamped "607"..... | 607.427 |
| Sidney, in northeast abutment of iron railroad bridge over Twelvepole Creek at station; aluminum tablet stamped "626"..... | 625.659 |
| Sidney, 1.2 miles south of, 50 feet north of track, 50 feet south of Twelvepole Creek, in bluff opposite "slow" sign, on rock; chiseled square..... | 636.72 |
| Genoa, 150 feet west of station, in southwest corner of culvert; aluminum tablet stamped "647"..... | 647.223 |
| Genoa, 3 miles south of, 40 feet west of road crossing, 300 feet north of Towdey coal mine (abandoned), in abutment of iron bridge over Twelvepole Creek; aluminum tablet stamped "660"..... | 659.971 |
| Ferguson, 0.1 mile east of post office, 300 feet west of Mr. Ferguson's house, in abutment of culvert over creek; aluminum tablet stamped "668".... | 668.307 |

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| | Feet. |
|---|---|
| Quaker, 0.9 mile south of post office, south of road, in northwest abutment of iron bridge over Twelvepole Creek; aluminum tablet stamped "685". | 684.795 |
| Quaker, 2.2 miles south of, 70 feet east of county road, 200 feet east of milepost "N 528–C 184," on center of abutment at north end of iron bridge 978; chiseled square | 687.34 |
| Dunlow, 1.7 miles southeast of, 40 feet east of county road, 0.5 mile northwest of Preston, east bank of railroad, on sandstone; chiseled square | 702.79 |
| Preston, 2.8 miles northeast of, on north side of Missouri Creek, 140 feet east of hollow to right, 600 feet west of foot of mountain, on sandstone; chiseled square | 889.25 |
| Preston, 4 miles northeast of, 300 feet west of Fork Run, 150 feet west of small house, 0.6 mile west of mountain foot, south of road, north of Milam Creek, in large bowlder; aluminum tablet stamped "832" | 832.234 |
| Preston, 6 miles northeast of, 0.1 mile east of old dam, 0.1 mile west of East Fork, in Milam Creek, on large sandstone; chiseled square | 734.41 |
| Spry, 0.7 mile southwest of, north of old sawmill, 0.5 mile west of mouth and 10 feet north of Milam Creek, 600 feet east of house, in bowlder; aluminum tablet stamped "708" | 708.115 |
| Spry, 1 mile north of, east of road, 150 feet east of Twelvepole Creek, in bank, on sandstone; chiseled square | 714.61 |
| Spry, 2 miles north of, south of road, on top of small summit, 100 feet north of road forks, in sandstone; aluminum tablet stamped "697" | 697.260 |
| Kiahsville, 0.3 mile southeast of post office, east of road, 300 feet east of mouth of Cove Creek, 300 feet from ford, in large bowlder; aluminum tablet stamped "674" | 674.506 |
| Kiahsville, 3.6 miles east of, north of Cove Creek, south of road, 200 feet east of house, 800 feet east of old sawmill, in sandstone; aluminum tablet stamped "762" | 761.714 |
| Covegap, 2 miles northwest of, east of road, halfway down hill to divide, in bank on edge of road, in sandstone; aluminum tablet stamped "1152" | 1,152.175 |
| Covegap, 3.45 miles north of, west of road, 60 feet north of road fork to Fourmile Creek, 80 feet north of summit, on edge of road, in sandstone; aluminum tablet stamped "1178" | 1,177.833 |
| Covegap, 4.8 miles north of, west of road in hollow, 70 feet west of graveyard, on sandstone; chiseled square | 1,174.05 |
| Covegap, 8.4 miles north of, at head of Beech Fork, 200 feet west of store at mountain foot, north of Beech Fork, south of road opposite hollow, in sandstone; aluminum tablet stamped "871" | 871.046 |
| Nestlow, 0.4 mile north of post office, 10 feet east of Beech Fork and west of road, 0.2 mile north of store, on sandstone; chiseled square | 767.32 |
| Nestlow, 3.45 miles north of, north of road, north of Beech Fork, 400 feet west of mouth of Wolfpen Branch, 0.1 mile east of schoolhouse and church, in large bowlder; aluminum tablet stamped "694" | 693.436 |

**MIDKIFF 15′ (HUNTINGTON 30′) QUADRANGLE.**

[Latitude 38°–38° 15′; longitude 82°–82° 15′.]

**From West Hamlin south along public highways to Covegap.**

| | |
|---|---|
| Sheridan, 100 feet east of railroad, west of road at forks near small white house by beech tree, in sandstone; aluminum tablet stamped "601" | 601.387 |
| Laverne post office (Brown City station), 70 feet west of railroad, in sandstone foundation of chimney southeast corner of house; aluminum tablet stamped "604" | 604.179 |

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| | Feet. |
|---|---|
| Midkiff, 1 mile south of, under fence west of railroad and road, in front of old house and store called "Rockville," 600 feet north of Tenmile Creek, in rock; aluminum tablet stamped "599" | 599.304 |
| Bradyville, 1.8 miles south of, south of railroad, north of road, near east end of tangent, near whistle post, in sandstone; aluminum tablet stamped "609" | 608.415 |
| Ranger, 2.05 miles south of, east of Fourteenmile Creek, by blacksmith shop, 0.4 mile south of East Fork, in sandstone outcrop; aluminum tablet stamped "605" | 605.385 |

**From Wewanta southeast along highways to Ferrellburg, thence north along highways to Griffithsville.**

| | |
|---|---|
| Fourteen, 0.8 mile east of post office, in bank, halfway up mountain, north of road, in sandstone; aluminum tablet stamped "1052" | 1,052.253 |
| Atenville, 0.25 mile northwest of, east of railroad between Eden Park and Atenville stations, opposite mouth of Dry Branch, in southeast end of culvert, in sandstone; aluminum tablet stamped "617" | 617.934 |
| Fry, in south abutment of culvert over Green Shoal Branch, fourth stone from top; aluminum tablet stamped "603" | 603.776 |
| Fry, 2.9 miles northeast of, 300 feet north of house, 0.2 mile north of mouth of Abbott Branch and sawmill, west of road, west of Big Ugly Creek, in large bowlder; aluminum tablet stamped "634" | 634.428 |
| Leet, 2 miles north of, east of run, west of road, 300 feet north of foot of mountain and head of Big Creek, in bowlder; aluminum tablet stamped "675" | 675.725 |
| Leet, 5.5 miles north of, south of Upton Branch, 0.5 mile east of head of Upton Branch, in bank near hollow, in large rock; aluminum tablet stamped "834" | 834.455 |
| Leet, 6.75 miles north of, north of road, east of Upton Branch, along edge, 300 feet north of foot of mountain, on sandstone; chiseled square | 747.58 |
| Spurlockville, 1.1 miles northwest of, west of road and Mud River, on edge of small summit, in sandstone; aluminum tablet stamped "726" | 726.923 |
| Palermo, 0.4 mile northwest of post office, 50 feet west of mouth of Parsner Creek, 50 feet north of Mud River, west of road forks, in sandstone; aluminum tablet stamped "691" | 692.260 |
| Bernie, 0.8 mile west of, east of Parsner Creek, in bank opposite hollow, on rock; chiseled square | 751.55 |
| Bernie, 0.1 mile west of post office, north of Parsner Creek and road, opposite old sawmill, in large sandstone; aluminum tablet stamped "807" | 807.962 |
| Bernie, 3 miles north of, east of road, east of Sycamore Fork, on top of small hill, opposite house, in rock cliff; aluminum tablet stamped "715" | 715.999 |
| Bernie, 3.8 miles north of, east of road, east of Sugar-tree Fork, opposite house and hollow, on rock cliff; chiseled square | 664.508 |

**From Griffithsville northwest to Hamlin.**

| | |
|---|---|
| Griffithsville, 1 mile northwest of post office, west of road, west of Middle Fork, in bank on small hill, in rock cliff; aluminum tablet stamped "667" | 668.219 |
| Griffithsville, 3.4 miles northwest of, east side of Middle Fork, at mouth of Seary Creek, on sandstone; chiseled square | 648.50 |

**Bluefield, Bramwell, Iaeger, Peterstown, Pounding Mill, and Welch quadrangles.**

**McDOWELL, MERCER, AND WYOMING COUNTIES.**

For additional elevations in West Virginia in this locality refer to the precise-level list, Hinton, W. Va., to Graham, Va. (pp. 14–15).

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Most of the leveling was done in 1909, in the Iaeger and Welch quadrangles by T. A. Green and C. H. Semper, in the Bramwell quadrangle by Green, Semper, and S. E. Taylor, and in the Bluefield quadrangle by Semper. Additional leveling in the Iaeger and Welch quadrangles was done in 1910 by S. E. Taylor, in the Bluefield quadrangle in 1913 by K. W. Trimble, and in the Peterstown quadrangle in 1913 by Trimble and H. S. Senseney. Leveling in Pounding Mill and additional leveling in Welch quadrangle was done in 1915 by C. W. Arnold.

### POUNDING MILL QUADRANGLE.

[Latitude 37°-37° 15′; longitude 81° 30′-81° 45′.]

**From the State line north along Norfolk & Western R. R. to point 0.3 mile north of Hartwell.**

| | Feet. |
|---|---|
| Hartwell station, 1.6 miles south of, east of track, 40 feet east of milepost I. 32, in rack for extra rail; spike marked "B. M. 1,705" | 1,704.63 |
| Hartwell station, 0.6 mile south of, 40 feet east of milepost I. 31, in base of rack for extra rail; spike marked "B. M. 1,634" | 1,633.98 |
| Hartwell, in front of station; top of rail | 1,599.7 |
| Hartwell station, 0.3 mile north of, on east end of north abutment of Norfolk & Western R. R. bridge 2,284; copper tablet stamped "1,584" | 1,583.313 |

### BLUEFIELD 15′ (POCAHONTAS 30′) QUADRANGLE.

[Latitude 37° 15′-37° 30′; longitude 81°-81° 15′.]

**From Montcalm north along Norfolk & Western Ry. and Virginian Ry. to Glatto.**

| | |
|---|---|
| Montcalm, 1.3 miles north of, 85 feet south of milepost 10, 180 feet south of south end of tunnel, 20 feet east of track, in large rock; aluminum tablet stamped "2210" | 2,210.375 |
| Rock, in front of station; top of rail | 2,221.1 |
| Rock, 1.8 miles north of, 570 feet north of milepost 13, east side, south end, in top of railroad culvert; aluminum tablet stamped "2277" | 2,276.762 |
| Matoaka, 513 feet east of station, in east end of face of south abutment of Virginian Ry. overhead crossing; aluminum tablet stamped "2362" | 2,362.448 |
| Matoaka, in front of Norfolk & Western Ry. station; top of rail | 2,362.6 |

**From Blake north along highways to Kegley, thence southwest along Virginian Ry. to Rock.**

| | |
|---|---|
| Blake, 200 feet west of signal tower, in south end of east abutment of railroad bridge 832; aluminum tablet stamped "2009" | 2,009.607 |
| Ingleside, 0.2 mile west of, 300 feet east of milepost 353, on west end of sandstone culvert; chiseled square | 1,959.41 |
| Ingleside, 1.6 miles north of, at road fork, 7 feet east of Ingleside-Princeton road, on sandstone ledge; chiseled square, marked "2080.6 B. M." | 2,080.66 |
| Ingleside, 2.5 miles north of, in northeast corner of road fork, on flat sandstone rock; chiseled square, marked "2229.9 B. M." | 2,229.98 |
| Ingleside, 3.6 miles north of, 10 feet east of highway, opposite south end of Virginian Ry. tunnel, in sandstone ledge; bronze tablet stamped "2513" | 2,513.265 |

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| | Feet. |
|---|---|
| Princeton, 2.2 miles south of, at road fork, top of bolthead, in floor-rail at northwest corner of wooden bridge; marked "2478.4" B. M. | 2,478.54 |
| Princeton, 0.8 mile south of, in southwest corner of road fork, on sandstone rock; chiseled square, marked "2391.2 B. M." | 2,391.82 |
| Princeton, Mercer County courthouse, in center of north face of top concrete step to main entrance; bronze tablet stamped "2449" | 2,449.457 |
| Princeton, 1.2 miles northwest of, 20 feet south of road fork, on sandstone ledge; chiseled square, marked "2526.1 B. M." | 2,526.04 |
| Princeton, 1.9 miles northwest of, 20 feet southwest of road fork, on sandstone ledge; chiseled square, marked "2347.7 B. M." | 2,347.64 |
| Princeton, 2.7 miles northwest of, 250 feet west of road fork, 10 feet south of highway, in sandstone ledge; bronze tablet stamped "2583" | 2,583.253 |
| Kegley Village, 30 feet south of road fork, 50 feet southeast of blacksmith shop, on sandstone ledge; chiseled square, marked "2442.9 B. M." | 2,443.90 |
| Kegley station, 0.5 mile west of, 70 feet southeast of Virginian Ry. grade crossing, 7 feet south of highway, in limestone ledge; bronze tablet stamped "2326" | 2,326.405 |
| Kegley station, 1.5 miles west of, 40 feet north of Virginian Ry. grade crossing, in base of telegraph pole; copper nail marked "2300.9 B. M." | 2,300.87 |
| King station, 0.8 mile east of, at west end of deep cut, 7 feet south of Virginian Ry., on sandstone rock; chiseled square marked "2275.6 B. M." | 2,275.61 |
| King station, opposite; top of rail | 2,261.0 |
| King station, 0.2 mile west of, 12 feet south of main track Virginian Ry., 35 feet south of point of frog of two side tracks, in sandstone rock; bronze tablet stamped "2260" | 2,260.218 |
| King station, 1.5 miles west of, 140 feet east of east end of Virginian Ry. tunnel, in top of northeast corner post of cattle guard; copper nail marked "2246.8 B. M." | 2,246.93 |
| Rock, 0.4 mile east of, 290 feet west of milepost 351, 10 feet north of Virginian Ry., on sandstone rock; chiseled square marked "2234.7 B. M." | 2,233.88 |
| Rock, Virginian Ry. station; top of rail opposite | 2,229.9 |
| Rock, Virginian Ry. bridge over Bluestone River, in top of north end of west concrete abutment; chiseled square marked "2229.3 B. M." | 2,228.50 |
| Rock, 1.8 miles north of, 570 feet north of milepost 13, east side, south end, in top of railroad culvert; aluminum tablet stamped "2277" | 2,276.762 |

**From Kegley north along highway to Camp Creek.**

| | |
|---|---|
| Kegley, 1 mile north of, west end of north abutment to highway bridge over Bluestone River, on bridge seat stone; chiseled square, marked "2084.6 B. M." | 2,084.50 |
| Spanishburg, 2.1 miles south of, 60 feet west of schoolhouse, 30 feet east of highway, in top of stump; copper nail marked "2376.7 B. M." | 2,376.38 |
| Spanishburg, 0.3 mile west of, in top of north end of west concrete abutment to highway bridge over Bluestone River; bronze tablet stamped "2071". | 2,070.960 |
| Spanishburg, 1.1 miles north of, 8 feet north of highway, on sandstone ledge; chiseled square, marked "2432.1 B. M." | 2,431.88 |
| Spanishburg, 2.2 miles north of, at right angle bend in highway, 10 feet west of highway, on sandstone rock; chiseled square, marked "2260.0 B. M." | 2,259.83 |
| Spanishburg, 3 miles north of, 7 feet east of highway, in sandstone ledge; bronze tablet stamped "2162" | 2,161.935 |
| Camp Creek, 2 miles south of, 300 feet south of dwelling, 7 feet east of highway, in root of oak stump; copper nail | 2,149.77 |

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**From Princeton northeast along electric railway grade to Athens, 0.9 mile east of.**

| | Feet. |
|---|---|
| Princeton, Virginian Ry. station; top of rail opposite | 2,393.6 |
| Princeton, Virginian Ry. station, 0.2 mile east of, 100 feet north of Hines Lumber Co.'s office, in root of maple tree; copper nail marked "2385.3 B. M." | 2,384.64 |
| Princeton, 1.8 miles east of, in north end of east floor rail to highway bridge over Christian Fork; copper nail marked "2393.1 B. M." | 2,392.51 |
| Princeton, 3.8 miles northeast of, in northeast corner of highway bridge over Dares Creek; copper nail marked "2463.1 B. M." | 2,462.50 |
| Princeton, 4.5 miles northeast of, in south side of street railway rock cut, 5 feet above grade, in sandstone rock; bronze tablet stamped "2518" | 2,517.004 |
| Athens, 2.5 miles southwest of, 500 feet southwest of schoolhouse, 10 feet south of highway, in base of telephone pole; copper nail marked "2677.3 B. M." | 2,676.55 |
| Athens, 1.9 miles west of, in northwest corner of road fork, in root of black-oak tree; copper nail marked "2723.1 B. M." | 2,722.43 |
| Athens, in top of north end of concrete step to west entrance of Massie Hotel; bronze tablet stamped "2598" | 2,596.926 |
| Athens, 0.9 mile east of, 12 feet north of highway, 15 feet west of small hollow at road fork, on sandstone rock; chiseled square marked "2445.6 B. M." | 2,444.89 |

## BRAMWELL QUADRANGLE.

[Latitude 37° 15′–37° 30′; longitude 81° 15′–81° 30′.]

**From point 1.1 miles east of East Vivian east along Norfolk & Western Ry. to State line.**

| | |
|---|---|
| East Vivian, in front of station; top of rail | 1,515.5 |
| East Vivian, 1.1 miles east of, in north end of east abutment of railroad bridge 883; aluminum tablet stamped "1555" | 1,554.837 |
| Eckman, in front of station; top of rail | 1,593.4 |
| Eckman, 0.3 mile east of, at milepost 388, north end of east abutment of railroad bridge 880; chiseled square | 1,604.00 |
| Keystone, front entrance to Alahambra Hotel, in east end of step above pavement; aluminum tablet stamped "1645" | 1,645.311 |
| North Fork, 1 mile east of, 200 feet east of milepost 385, on north end of bridge seat of west abutment of railroad bridge 874; chiseled square | 1,759.96 |
| Powhattan, in front of station; top of rail | 1,799.8 |
| Upland, 50 feet south of railroad, at northwest corner of footbridge over Elkhorn Creek, 100 feet north of company store; aluminum tablet stamped "1843" | 1,843.296 |
| Elkhorn, at milepost 383, on west end of north abutment of footbridge over Elkhorn Creek; chiseled hole | 1,881.87 |
| Elkhorn, 1 mile east of, at milepost 382, on north end of bridge seat of east abutment of railroad bridge 867; chiseled square | 1,948.45 |
| Ennis, west of station, at road crossing; top of rail | 1,995.9 |
| Ennis, 0.6 mile east of, 950 feet east of milepost 381, in north end of east abutment of arch over Elkhorn Creek and wagon road; aluminum tablet stamped "2032" | 2,031.834 |
| Lick Branch, in front of station; top of rail | 2,051.6 |
| Lick Branch, at road crossing just east of company store, in cut; copper bolt marked "B. M. No. 64" | 2,058.25 |
| Maybeury, in front of station; top of rail | 2,171.0 |

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| | Feet. |
|---|---|
| Coaldale, 350 feet west of post office, 125 feet east of telegraph station, north of railroad, in sandstone ledge; aluminum tablet stamped "2339". | 2,339.416 |
| Coaldale, 0.4 mile east of, at top of divide over long tunnel, 12 feet south of property-line post in center of divide; top of rail section | 2,652.00 |
| Ruth, in front of station; top of rail | 2,392.3 |
| Ruth, 0.6 mile east of, on southeast corner of concrete foundation for block signal; chiseled square | 2,358.23 |
| Cooper, 300 feet west of tunnel, on north end of east abutment of railroad bridge 854; chiseled square | 2,309.28 |
| Bluestone, in front of station; top of rail | 2,285.3 |
| Bluestone, in north end of east abutment of railroad bridge 851; aluminum tablet stamped "2283" | 2,283.248 |
| Nemours, road crossing at mail crane; top of rail | 2,296.5 |
| Nemours, 300 feet west of milepost 372, in north end of east abutment of railroad bridge 848; aluminum tablet stamped "2300" | 2,299.616 |
| Flattop, 300 feet west of milepost 371, on north end of east abutment of railroad bridge 844; chiseled square | 2,309.10 |

**From Cooper northeast along Norfolk & Western Ry. to Montcalm.**

| | |
|---|---|
| Cooper, 300 feet west of tunnel, on north end of east abutment of railroad bridge 854; chiseled square, marked "No. 44 U. S. B. M. 2309" | 2,309.382 |
| Cooper, 0.6 mile north of, 60 feet north of milepost 2, 4 feet west of track, in side cut; marked square on top of rock | 2,264.53 |
| Bramwell, in front of station; top of rail | 2,252.7 |
| Simmons, in front of station; top of rail | 2,249.6 |
| Simmons, 0.1 mile north of, 20 feet east of track, in top of northwest foundation of water tank; aluminum tablet stamped "2247" | 2,247.330 |
| Flipping, 0.2 mile south of, in top of west abutment on north side of highway bridge over Bluestone River; aluminum tablet stamped "2225" | 2,224.777 |
| Flipping, in front of station sign; top of rail | 2,220.9 |
| Montcalm, opposite station; top of rail | 2,213.8 |

**From Giatto northwest along Virginian Ry. to Micajah tunnel.**

| | |
|---|---|
| Giatto, in front of station; top of rail | 2,373.1 |
| Giatto, 1.1 miles west of, 55 feet west of milepost 18, 6 feet south of Norfolk & Western Ry., in top of rock; aluminum tablet stamped "2417" | 2,416.932 |
| Clark, in south foundation pier of Virginian Ry. water tank; aluminum tablet stamped "2487" | 2,487.121 |
| Clark, in front of station; top of rail | 2,522 |
| Clark, 0.7 mile northwest of, 8 feet west of railroad, on sandstone ledge; chiseled square | 2,466.93 |
| Clark, 3 miles northwest of, 930 feet west of the west end of Micajah tunnel of Virginian Ry., 15 feet south of railroad, 5 feet south of stone culvert, in sandstone ledge; aluminum tablet stamped "2239 1909" | 2,238.689 |

**From Vivian northeast up Main Fork of Bottom Creek and down Whitecoak Branch of Pinnacle Creek to mouth.**

| | |
|---|---|
| East Vivian, 110 feet east of milepost 391, north side of railroad; chiseled square | 1,510.84 |
| Vivian, 1 mile northeast of, junction of county road and tramway up Main Fork of Bottom Creek, 40 feet west of stream crossing, on sandstone rock; chiseled square | 1,660.75 |



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| | Feet. |
|---|---|
| Vivian, 3.4 miles northeast of, at south end of mound in creek bed, on sandstone bowlder; chiseled square | 1,993.98 |
| Vivian, 4.6 miles northeast of, 75 feet east of house of Thomas Inglent at foot of hill, on sandstone bowlder; chiseled square | 2,153.67 |
| Vivian, 5.5 miles northeast of, at road forks, on top of ridge, 700 feet west of house of Mr. Williams, 15 feet south of road, in sandstone ledge; aluminum tablet stamped "2432 1909" | 2,432.020 |
| Vivian, 6.7 miles northeast of, 50 feet north of road forks, in low gap, north side of county road, on sandstone ledge; chiseled square | 2,289.77 |
| Vivian, 8 miles northeast of, north side of county road down Whiteoak Branch of Pinnacle Creek, 15 feet west of small drain across road; aluminum tablet stamped "2028 1909" | 2,027.943 |
| Herndon, 7.4 miles west of, 15 feet south of county road at junction of Payne Fork with Whiteoak Branch of Pinnacle Creek, on large rock; chiseled square | 1,760.91 |

**From milepost 11 east along Norfolk & Western Ry. to Black Wolf mine.**

| | |
|---|---|
| Dearing (Black Wolf mine), 5.5 miles south of Gary, 858 feet south of milepost 12, north end of pier supporting tipple, 8 feet west of track; aluminum tablet stamped "1504" | 1,504.037 |

**From Black Wolf mine east along Norfolk & Western Ry. to Anawalt (single spur line).**

| | |
|---|---|
| Gary, 6.4 miles south of, 45 feet north of milepost 13; top of south end on west side of railroad culvert marked "U. S. B. M. 1511" | 1,510.63 |
| Pageton, 465 feet north of station, in top of west side of south abutment of railroad bridge 2214 on branch line to mine; aluminum tablet stamped "1577" | 1,577.244 |
| Pageton, in front of station; top of rail | 1,584.3 |
| Pageton, 2.3 miles south of, top of south end of retaining wall at mine, 12 feet south of milepost 17, 10 feet west of track; marked square | 1,679.00 |
| Anawalt, in south end of west face of stone foundation of coal company store; aluminum tablet stamped "1716" | 1,715.828 |

**From point near Herndon southeast along highway and Virginian Ry. to Micajah tunnel.**

| | |
|---|---|
| Clark, 6.5 miles northwest of, on west side of county road, about 600 feet north of private road to west, in sandstone ledge; aluminum tablet stamped "2709 1909" | 2,708.177 |
| Clark, 5.5 miles northwest of, 60 feet west of crossroads, in low gap, 10 feet south of county road, on sandstone rock; chiseled square | 2,416.58 |
| Clark, 3.5 miles northwest of, 110 feet west of county road, in low gap over Micajah tunnel of Virginian Ry, on sandstone ledge; chiseled square | 2,450.01 |

**From point on State line 2 miles north of Smith Store, Va., north down South Fork of Tug River to Dearing.**

| | |
|---|---|
| Dearing, 7 miles south of, in West Virginia, 2.2 miles north of Smith store, Va., on east side of road, 50 feet south of forks, in sandstone ledge; aluminum tablet stamped "2528 Va 1909" | 2,527.635 |
| Dearing, 5.8 miles south of, on straight bend of road to southwest, on north side of road, on sandstone rock; chiseled square | 2,014.59 |
| Dearing, 4.8 miles south of, 615 feet north of mouth of Laurel Branch, 5 feet west of road, on sandstone bowlder; chiseled square | 1,717.71 |

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| | Feet. |
|---|---|
| Dearing, 3 miles south of, 0.8 mile northwest of Taylor's store, east side of road, 30 feet south of Jump Branch, in flat sandstone rock; aluminum tablet stamped "1620 1909" | 1,619.692 |
| Dearing, 0.7 mile south of, on west side of road, 20 feet south of stream crossing, highest point on oblong sandstone rock; marked circle | 1,506.13 |

**From Bluestone southwest along Norfolk & Western Ry. branch to State line crossing (part of double line to Pocahontas, Va.).**

| | |
|---|---|
| Bluestone, in north end of east abutment of railroad bridge 851; aluminum tablet stamped "2283" | 2,283.248 |
| Virginia-West Virginia State line crossing, at road crossing, north of long tunnel; top of rail, warning post marked "U. S. 2308" | 2,308.0 |

## WELCH QUADRANGLE.

[Latitude 37° 15′–37° 30′; longitude 81° 30′–81° 45′.]

**From Serpell east along Norfolk & Western Ry. to East Vivian.**

| | |
|---|---|
| Serpell, in front of station; top of rail | 1,062.8 |
| Serpell, 1.3 miles east of, 400 feet east of milepost 414, in east end of culvert over running stream; aluminum tablet stamped "1077" | 1,076.402 |
| Roderfield, in front of station; top of rail | 1,094.9 |
| Roderfield, 1.9 miles east of, 400 feet southwest of milepost 411, in south end of west abutment of new railroad bridge over Tug River; aluminum tablet stamped "1134" | 1,134.062 |
| Claren, in front of station; top of rail | 1,133.8 |
| Twin Branch, 200 feet east of mouth of tunnel, 80 feet west of station, in north end of east abutment of railroad bridge 902; aluminum tablet stamped "1178" | 1,177.735 |
| Davy, 100 feet southwest of milepost 407, south end of east bridge seat of railroad bridge 901; chiseled square | 1,180.03 |
| Davy, in front of station; top of rail | 1,191.3 |
| Davy, 1.25 miles east of, 275 feet east of mouth of tunnel, in south end of east abutment of railroad bridge 899A; aluminum tablet stamped "1225" | 1,224.509 |
| Davy, 3.8 miles east of, on south end of bridge seat of east abutment of railroad bridge 997; chiseled square | 1,263.01 |
| Davy, 4.6 miles east of, 250 feet west of double tunnel, 60 feet west of milepost 401, in north end of east abutment of railroad bridge 895; aluminum tablet stamped "1281" | 1,281.265 |
| Welch, on south end of east abutment of railroad bridge 893; chiseled square | 1,298.96 |
| Welch, on west side of front entrance to First National Bank, in fourth tier of stone above foundation; aluminum tablet stamped "1304" | 1,303.434 |
| Welch, in front of station; top of rail | 1,300.7 |
| Huger, in front of station; top of rail | 1,332.4 |
| Huger, 0.7 mile east of, in northwest corner of concrete arch over wagon road; aluminum tablet stamped "1361" | 1,361.293 |
| Huger, 2.8 miles east of, 130 feet east of milepost 394, 50 feet east of Cirrus Coal & Coke Co.'s store, on concrete well curb; top of screw | 1,446.57 |
| West Vivian, railroad junction west of, in south end of west abutment of railroad bridge 885-A over Elkhorn Creek; aluminum tablet stamped "1476" | 1,475.423 |

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**From Welch southeast along Norfolk & Western Ry. to milepost 11.**

| | Feet. |
|---|---|
| Welch, on south end of east abutment of railroad bridge 893; chiseled square marked "No. 25 U. S. B. M. 1299" | 1,298.958 |
| Welch, 3.1 miles south of, 4 feet north of milepost 3, 280 feet south of railroad bridge 2202, on face of side corner; aluminum tablet stamped "1349" | 1,349.006 |
| Wilcoe, in front of station; top of rail | 1,379.4 |
| Kennon, opposite station platform, on east side of track, at road crossing, in top of north end of railroad culvert; aluminum tablet stamped "1395" | 1,395.172 |
| Kennon, in front of station; top of rail | 1,395.8 |
| Gary, in front of station; top of rail | 1,401.1 |
| Gary, 0.4 mile south of, 40 feet south of milepost 7, 10 feet west of track, on top of rock; square marked "U. S. B. M. 1412" | 1,411.66 |
| Gary, 2.5 miles south of, 765 feet south of milepost 9, 35 feet south of railroad crossing, 12 feet east of track, in top of large rock; aluminum tablet stamped "1454" | 1,453.871 |

**From Atwell southeast up Dry Fork along Norfolk & Western Ry. to Berwind.**

| | |
|---|---|
| Atwell, 1.6 miles southeast of, 1,855 feet south of milepost 15, in west side of south abutment of railroad bridge 2277; aluminum tablet stamped "1268" | 1,267.775 |
| English, in front of station; top of rail | 1,292.2 |
| English, 0.4 mile southeast of, south of milepost 18, 20 feet west of track, on large rock used as an anchor for smokestack guy; aluminum tablet stamped "1296" | 1,296.055 |
| English, 1.3 miles southeast of, 65 feet south of milepost 19, 20 feet east of track, on large rock; square marked "U. S. B. M. 1313" | 1,312.59 |
| English, 3.2 miles southeast of, 493 feet north of milepost 21, top of railroad culvert at south end of west abutment of; aluminum tablet stamped "1335" | 1,334.308 |
| War, in front of station; top of rail | 1,341.7 |
| English, 5.3 miles southeast of, at milepost 23, top of south abutment on west side of railroad bridge 2280; square marked "U. S. B. M. 1377" | 1,377.15 |
| English, 6.2 miles southeast of, 611 feet north of milepost 24, top of north end of west abutment of railroad culvert; aluminum tablet stamped "1403" | 1,402.383 |

**From point near Hartwell north along Norfolk & Western Ry. to Berwind.**

| | |
|---|---|
| Canebrake, 0.25 mile north of, 40 feet north of milepost I.29, top of rack for extra rail; copper nail marked "B. M. 1548" | 1,548.00 |
| Canebrake, 1.25 miles north of, west of track, in base of milepost I.28; spike, marked "B. M. 1522" | 1,521.55 |
| English, 7.9 miles southeast of, in west side of top of south abutment of railroad bridge over Jacob Fork; square marked "U. S. B. M. 1452" | 1,451.32 |
| Berwind, in front of station; top of rail | 1,482.8 |
| Berwind, 0.1 mile southeast of, 270 feet south of milepost 27, in top in center of west side of railroad culvert; aluminum tablet stamped "1487" | 1,486.917 |

**From Rift up Jacob Fork to Big Creek, thence up Big Creek to Squirejim post office (unchecked spur line).**

| | |
|---|---|
| English, 7.9 miles southeast of, west side of south abutment of railroad bridge over Jacob Fork, top; square marked "U. S. B. M. 1452" | 1,451.32 |
| Rift, 1.1 miles east of, 200 feet northwest of forks of Big Creek and Jacob Fork of Dry Fork, 5 feet north of wooden tramway, in sandstone rock; aluminum tablet stamped "1453" | 1,452.851 |

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| | Feet. |
|---|---|
| Rift, 2.5 miles east of, 2 feet south of tramway; chiseled square on sandstone rock, marked "U. S. B. M. 1498" | 1,498.50 |
| Rift, 4 miles east of, 3 feet north of tramway; chiseled square on sandstone ledge, marked "U. S. B. M. 1532" | 1,532.08 |
| Rift, 5.6 miles east of, 175 feet south of forks of Long Branch and Big Creek, 20 feet south of tramway, in sandstone rock; aluminum tablet stamped "1576" | 1,576.076 |
| Squirejim, 4 miles northwest of, 5 feet north of trail; chiseled square on sandstone rock, marked "U. S. B. M. 1603" | 1,603.14 |
| Squirejim, 3 miles northwest of, 40 feet south of trail; point on top of large sandstone rock, marked "U. S. B. M. 1650" | 1,649.77 |
| Squirejim, 1.7 miles northwest of, 450 feet south of house at mouth of hollow, 30 feet east of road; chiseled square on sandstone marked "U. S. B. M. 1700" | 1,699.93 |
| Squirejim, 1 mile northwest of, 80 feet south of house at stream forks, 10 feet east of road; chiseled square on sandstone rock marked "U. S. B. M. 1714" | 1,714.38 |
| Squirejim, 600 feet north of, 40 feet east of road, 125 feet west of schoolhouse, in sandstone ledge; aluminum tablet stamped "1805" | 1,805.086 |

## IAEGER QUADRANGLE.

[Latitude 37° 15′–37° 30′; longitude 81° 45′–82°.]

**From point 0.8 mile east of Panther south along tramway up Panther Creek to Meethouse Fork of Panther Creek.**

| | |
|---|---|
| Panther, 0.8 mile east of, in south end of east bridge seat of railroad bridge 915 over Short Pole Creek; aluminum tablet stamped "944" | 943.096 |
| Panther, in front of station; top of rail | 944 |
| Panther, 0.4 mile south of, 10 feet east of tramway; chiseled square on sandstone ledge marked "941" | 941.21 |
| Panther, 1.4 miles south of, opposite Trap Fork, 10 feet east of tramway; chiseled square on sandstone rock marked "972" | 971.998 |
| Panther, 2 miles south of, 100 feet north of junction of Trace Fork and Panther Creek, 8 feet east of iron tramway, in sandstone ledge; aluminum tablet stamped "988" | 988.475 |
| Panther, 3.9 miles south of, 5 feet west of tramway opposite small branch to left, on sandstone bowlder; chiseled square marked "1052" | 1,052.02 |
| Panther, 5.1 miles south of, 7 feet north of iron tramway, on sandstone bowlder; chiseled square marked "1097" | 1,097.26 |
| Panther, 5.9 miles south of, 70 feet northeast of junction of George Fork and Panther Creek, 25 feet east of tramway, in large sandstone rock; aluminum tablet stamped "1134" | 1,133.716 |
| Panther, 7.4 miles south of, south end of cleared bottom, 35 feet east of tramway, on sandstone rock; chiseled square marked "1186" | 1,186.02 |
| Panther, 8.2 miles south of, in creek bed; point on top of large sandstone rock marked, "1199" | 1,199.36 |
| Panther, 8.9 miles south of, 80 feet north of junction of Meethouse Fork and Panther Creek, in large sandstone rock at end of iron tramway; aluminum tablet stamped "1232" | 1,232.081 |

**From Mohawk southeast and east along Norfolk & Western Ry. to Serpell.**

| | |
|---|---|
| Mohawk, 1.1 miles southeast of; point on telegraph pole marked "932.54" (railroad bench mark) | 934.40 |
| Panther, west of station, at road crossing; top of rail | 944.1 |

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| | Feet. |
|---|---|
| Panther, 0.8 mile east of, in south end of east bridge seat of railroad bridge 915 over Short Pole Creek; aluminum tablet stamped "944" | 943.096 |
| Panther, 2.5 miles east of, 35 feet east of milepost 427, on sandstone bowlder; chiseled square | 958.54 |
| Hull, in front of station; top of rail | 961 |
| Hull, 350 feet east of station, 50 feet north of railroad, in west end of sandstone culvert; aluminum tablet stamped "960" | 959.414 |
| Bridge 913, north side, in east bridge seat; top of bolt (railroad bench mark) | 960.86 |
| Hull, 1.7 miles east of, 40 feet south of milepost 424, on rock; chiseled square | 969.92 |
| Iaeger, at junction of main line and Dry Fork branch of Norfolk & Western Ry., in east end of north abutment of railroad bridge over Tug River; aluminum tablet stamped "981" | 980.370 |
| Iaeger, 1 foot south of tablet; top of iron bolt (railroad bench mark) | 981.44 |
| Iaeger, in front of station; top of rail | 982.1 |
| Bridge 911, on east abutment (railroad bench mark) | 984.98 |
| Iaeger, 2.1 miles east of, north end of west abutment of railroad bridge 910; aluminum tablet stamped "996" | 995.374 |
| Iager, 3 miles east of, 850 feet east of milepost 419, north end of west abutment of railroad bridge 909; chiseled square | 1,008.58 |
| Wilmore, on north end of west abutment of railroad bridge 908 (railroad bench mark) | 1,022.73 |
| Wilmore, 350 feet west of telegraph office and milepost 417, 100 feet north of railroad, 10 feet north of fence corner, in sandstone bowlder; aluminum tablet stamped "1036" | 1,035.942 |
| Wilmore, in front of station; top of rail | 1,038.1 |
| Wilmore, 1 mile east of, 15 feet east of milepost 416, on east end of sandstone culvert; chiseled square | 1,051.14 |

**From Iaeger southeast along Norfolk & Western Ry. up Dry Fork to Atwell (single spur line).**

| | |
|---|---|
| Iaeger, junction of main line and Dry Fork branch of Norfolk & Western Ry., in east end of north abutment of railroad bridge over Tug River; aluminum tablet | 980.370 |
| Iaeger, 3.1 miles south of, 854 feet south of milepost 3, west of track, in top of railroad culvert; aluminum tablet stamped "1024" | 1,024.153 |
| Iaeger, 4 miles south of, 20 feet south of milepost 4, 6 feet west of track, on top of large rock; square, marked "U. S. B. M. 1038" | 1,036.30 |
| Ritter, in front of station; top of rail | 1,043.3 |
| Ritter, 1.2 miles south of, in top of south abutment, west end of railroad bridge 2275; aluminum tablet stamped "1061" | 1,060.394 |
| Ritter, 2.4 miles south of, 45 feet south of milepost 7, west of track, top of railroad culvert; square, marked "U. S. B. M. 1088" | 1,087.54 |
| Carlos, in front of station sign; top of rail | 1,092.9 |
| Carlos, 1.8 miles south of, 90 feet south of milepost 9, 10 feet east of track, in top of railroad culvert; aluminum tablet stamped "1132" | 1,131.937 |
| Bradshaw, in front of milepost 11; top of rail | 1,179.5 |
| Bradshaw, 0.9 mile southeast of, 534 feet north of milepost 12, 6 feet west of track, in top of railroad culvert; aluminum tablet stamped "1199" | 1,198.855 |
| Atwell, in front of station; top of rail | 1,237.1 |

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## PETERSTOWN QUADRANGLE.

[Latitude 37° 15′–37° 30′; longitude 80° 45′–81°.]

### From point near Athens northeast along highways to Mercer Salt Works.

| | Feet. |
|---|---|
| Athens, 2.1 miles northeast of, at road fork, 25 feet east of fording, 10 feet north of highway, in root of stump; copper nail, marked "2320.6 B. M.". | 2,319.86 |
| Pettry post office, 50 feet west of southwest corner of store, 70 feet east of southeast corner of church, in sandstone rock; bronze tablet stamped "2567" | 2,566.202 |
| Pettry, 0.9 mile northeast of, 7 feet north of highway, on sandstone ledge; chiseled square, marked "2500.7 B. M." | 2,499.99 |
| Pettry, 1.9 miles northeast of, 8 feet north of highway, in base of telephone pole; copper nail, marked "2369.0 B. M." | 2,368.28 |
| Tophet post office, 1.1 miles west of, 7 feet north of highway, in sandstone ledge; bronze tablet stamped "2170" | 2,169.063 |
| Tophet post office, 160 feet north of, 10 feet east of highway, in root of oak tree; copper nail, marked "2005.6 B. M." | 2,005.85 |
| Mercer Salt Works, 1.9 miles west of, in northeast corner of road fork, on sandstone ledge; chiseled square, marked "1555.4 B. M." | 1,555.59 |
| Mercer salt well, 40 feet south of road leading into store yard, in center of highway, in large stone; aluminum tablet stamped "1470" | 1,470.466 |

### From Mercer Salt Works along highways east to Cashmere, thence southwest to Glenlyn. (See Virgnia list for portion of this line.)

| | |
|---|---|
| Fergerson's ferry, 0.5 mile south of, west side of road on ledge; chiseled square | 1,568.41 |
| Fergerson's ferry, 1.5 miles south of, 10 feet south of forks of road, east side of road, on rock; painted circle | 1,851.93 |
| Neponset, north side of road, top of hill, in root of tree; copper nail with washer, stamped "U. S. G. S. W. Va. B. M." | 2,036.32 |
| Chestnut Hill, 10 feet south of store, at gate, in stone; bronze tablet stamped "2213" | 2,213.598 |
| Chestnut Hill, 1.1 miles east of, northeast corner of cross roads, in fence post; nail | 2,081.97 |
| Cashmere, 0.8 mile west of, 10 feet east of gate, south side of road, on stone; chiseled square | 2,060.05 |
| Cashmere, 0.3 mile south of, east corner of south abutment of bridge; bronze tablet stamped "1918" | 1,918.256 |
| Cashmere, 1.1 miles south of, east side of road, 60 feet north of summit, in root of tree; copper nail with washer, stamped "U. S. G. S. W. Va. B. M. 2077" | 2,076.530 |
| Cashmere, 2.2 miles south of, 450 feet south of forks of road, west side of road, at gate, in root of tree; copper nail with washer, stamped "U. S. G. S. W. Va. B. M. 1935" | 1,935.05 |
| Cashmere, 2.3 miles south of, 990 feet south of forks of road, east side of road, 4 feet west of fence, in ledge; bronze tablet stamped "1922" | 1,921.593 |
| Peterstown, 1.5 miles north of, northwest corner of forks of road, in telephone pole; nail | 1,788.67 |
| Peterstown, northwest corner of First National Bank, 2 feet south of doorway; bronze tablet stamped "1612" | 1,611.684 |

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### Gilbert, Holden, Logan, Louisa, Matewan, Naugatuck, and Williamson 15′ quadrangles (Kenova, Oceana, and Warfield 30′ quadrangles).

#### LOGAN, MINGO, WAYNE, AND WYOMING COUNTIES.

The following elevations were determined by primary leveling extended from Graham, Va., and Catlettsburg, Ky., points of the precise-level net.

The leveling was done in the Gilbert quadrangle in 1896 by Hargraves Wood, and in 1909 by J. H. Wilson and T. A. Green; in the Louisa, Matewan, Naugatuck, and Williamson quadrangles in 1909 by T. A. Green; in Logan quadrangle in 1896 by Hargraves Wood; in 1911 by C. W. Arnold; and in the Holden, Logan, and Naugatuck quadrangles in 1910 by S. E. Taylor. One bench mark in the Naugatuck quadrangle was set in 1907 by E. S. Dawson.

#### GILBERT 15′ (OCEANA 30′) QUADRANGLE.

[Latitude 37° 30′–37° 45′; longitude 81° 45′–82°.]

**From Man northeast up Buffalo Creek (double spur line).**

| | Feet. |
|---|---|
| Man, 0.25 mile above mouth of Buffalo Creek, opposite Martin Doss's place and 60 feet above foot log, on west side of Buffalo Creek, in rock; copper bolt stamped "U. S. G. S. 728 Ft. B. M." | 729.102 |
| Buffalo Creek, 2 miles above mouth of; nail in root of sycamore tree on east side of road | 785.60 |

**From Man up Rockhouse Branch (single spur line).**

| | |
|---|---|
| Man, 2 miles southwest of, 1 mile above mouth of Rockhouse Creek, west side of creek, in rock near south end of cliff; copper bolt stamped "U. S. G. S. 792 Ft. B. M." | 793.331 |

**Up Big Huff Creek from mouth to Beech Branch.**

| | |
|---|---|
| Man, 1 mile south of, east side of and 300 feet above mouth of Big Huff Creek, in rock; copper bolt stamped "U. S. G. S. 727 Ft. B. M." | 728.537 |
| Big Spring Branch, 1,800 feet above crossing of; nail in root of sycamore tree on north side of road | 794.09 |
| Cyclone, opposite Henchman's house, in rock; copper bolt stamped "U. S. G. S. 854 Ft. B. M." | 855.492 |
| Lem Brown's place; nail in root of poplar tree on south side of road | 994.51 |

**From point near Man south along road up Guyandot River to Gilbert.**

| | |
|---|---|
| Guyandot River, 200 feet above Wayne McDonald's store; nail in root of small sycamore tree on west side of road | 760.72 |
| Spice Creek, 0.5 mile above, 1 mile below Jim Justice's place; nail in root of white walnut tree on north side of road | 771.60 |
| Gilbert, 1 mile below, 200 feet above old mill race where wagon road crosses river; nail in root of sycamore tree with spreading roots | 804.97 |

**From Gilbert south up Gilbert and down Ben Creeks to Wharncliffe.**

| | |
|---|---|
| Gilbert, opposite Alexander Stafford's store, in field; iron post stamped "832" | 833.146 |
| Gilbert Creek, 1 mile above mouth of, in creek and road at first crossing above Zat Ellis's house; rock marked "B. M." | 848.62 |

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| | Feet. |
|---|---|
| Gilbert Creek, 0.5 mile above Horsepen Creek, 600 feet below Scott Bliss's; nail in root of beech tree on east side of road | 892.06 |
| Ben Creek, head of right fork below deserted cabin, on east side of road near rock cut at foot of mountain; chisel mark on rock | 1,201.07 |
| Wharncliffe, 4 miles northeast of, 300 feet below Laurel Branch, on east side of road, opposite T. E. Brown's house, Ben Creek; iron post stamped "1020" | 1,021.315 |
| Ben Creek, 200 feet above Spring Fork Branch, at Michael Hatfield's; nail in root of black oak tree on west side of road | 890.82 |

**Elevation near Wharncliffe redetermined by leveling of 1909.**

| | |
|---|---|
| Wharncliffe, 0.5 mile south of, corner of State line between Kentucky, Virginia, and West Virginia; iron post stamped "825" | 826.697 |

**From Wharncliffe southeast up Big Sandy River and Long Pole Creek (single spur line).**

| | |
|---|---|
| Dotson, 4 miles east of, up Long Pole Creek, 1,200 feet below Oak Branch, on south side of road; iron post stamped "1050" | 1,051.819 |

**Along Island Creek from Little Creek to Three Forks.**

| | |
|---|---|
| Oilville, 4.4 miles southeast of, 1.8 miles south of Lewis Chafin's place, 350 feet south of coal chute, on east side of road; point on arch of triangular shaped rock marked "U. S. □ B. M. 953" | 952.44 |
| Crane's sawmill, 0.5 mile south of, 400 feet north of Anne Hatfield's house, 10 feet west of river, in arch of large sandstone bowlder; aluminum tablet stamped "1048" | 1,047.776 |

**From point near Calico east along road down Horsepen Fork to Gilbert.**

| | |
|---|---|
| Calico, 0.6 mile north of, 5 feet west of road, 400 feet north of private coal chute, in sandstone outcrop; aluminum tablet stamped "1505 W. Va. 1909" | 1,504.447 |
| Calico, at forks of road, west of post office, on west side of road, 50 feet north of forks; point on sharp projection of sandstone outcrop marked "U. S. □ B. M. 1610" | 1,609.161 |
| Calico, 1 mile east of, 25 feet south of road, 150 feet south of coal opening; copper nail in root of 1-foot beech tree marked "U. S. B. M. 1390" | 1,389.52 |
| Calico, 2 miles east of, on west side of road, on south side of creek, near telephone pole 15 feet south of road; highest point on oblong sandstone rock marked "U. S. B. M. 1198" | 1,197.84 |
| Calico, 3 miles east of, on west side of road, 300 feet west of rock wall at mouth of Coon Branch, in sandstone bowlder 3 by 3 by 3 feet; bronze tablet stamped "1108 W. Va. 1909" | 1,107.310 |
| Calico, 5.4 miles east of, at junction of Horsepen and Browning forks of Gilbert Creek, 30 feet north of front entrance to Farrell schoolhouse, 20 feet west of elm tree 3 feet in diameter, in sandstone rock; bronze tablet stamped "937 W. Va. 1909" | 936.580 |
| Horsepen, 0.8 mile east of, on north side of road, on west side of ford; highest point on sandstone bowlder 4 by 3 by 2 feet marked "U. S. B. M. 852" | 851.74 |
| Horsepen, 1.8 miles east of, on north side of road, 450 feet east of blacksmith shop; highest point on brown sandstone rock marked "U. S. B. M.823" | 822.93 |

**From Gilbert north down Guyandot River and up Elk Creek to Trace Branch.**

| | |
|---|---|
| Gilbert, 1.9 miles northwest of, on north side of road, on lower projection of east end of ragged sandstone outcrop; bronze tablet stamped "814 W. Va. 1909" | 813.388 |

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| | Feet. |
|---|---|
| Gilbert, 4 miles northwest of, at point where river turns sharply to west; highest point on sandstone rock on west side of road marked "U. S. B. M. 778" | 777.93 |
| Gilbert, 5.3 miles northwest of, south side of Sylvia Branch, west side of road, at point where road turns sharply up hollow, in sandstone outcrop; bronze tablet stamped "776 W. Va. 1909" | 775.407 |
| Christian, forks of road at mouth of Elk Creek, 75 feet south of Elk Creek, 60 feet north of Vance's store; copper nail in root on west side of holly tree 1 foot in diameter marked "U. S. B. M. 763" | 763.02 |
| Christian, 0.6 mile northeast of, on north side of second stream crossing above schoolhouse, in sandstone ledge; bronze tablet stamped "780 W. Va. 1909" | 780.015 |
| Christian, 3.6 miles northeast of, 8 feet north of road, 400 feet east of Ike Vance's place, in sandstone rock; bronze tablet stamped "1002 W. Va. 1909" | 1,002.135 |
| Christian, 5.7 miles northeast of, on north side of road, 200 feet east of hollow from north, 50 feet west of bars across road; point on sandstone rock marked "U. S. B. M. 1232" | 1,231.95 |
| Christian, 6.5 miles northeast of, north side of trail, west side of stream crossing, 200 feet west of old rock chimney, in sandstone ledge; bronze tablet stamped "1333 W. Va. 1909" | 1,333.047 |

**From Gilbert southeast along road up Guyandot River and Left Fork to Indian Ridge.**

| | |
|---|---|
| Gilbert, 2.8 miles southeast of, on sandstone ledge on left side of road, 790 feet above mouth of branch; bronze tablet stamped "912" | 912.016 |
| Justice, 2.3 miles above, in sandstone rock on right side of road, 170 feet south of forks of road from Little Cub Creek and 1,250 feet north of mouth of Lizard Branch; aluminum tablet stamped "1070" | 1,070.342 |
| Hanover, 150 feet south of post office, in sandstone rock on left side of road; bronze tablet stamped "1057" | 1,055.987 |
| Hanover, 2.1 miles south of, 25 feet from road on right-hand side of road up Muzzle Fork and 0.3 mile from mouth; copper nail in root of beech tree. | 1,094.35 |
| Hanover, 3.3 miles south of, at foot of pine tree with big rock embedded in roots, 1,250 feet above schoolhouse, in rock on left side of road; bronze tablet stamped "1187" | 1,186.939 |
| Iaeger, 4.5 miles northwest of, 500 feet south of where road crosses Indian Ridge, on left side of road, in sandstone rock; bronze tablet stamped "1582" | 1,582.009 |

**From Wharncliffe southeast along Norfolk & Western Ry. to Mohawk.**

| | |
|---|---|
| Wharncliffe, railroad bridge over Ben Creek; bridge seat of east abutment (railroad bench mark—railroad elevation 820.39 feet) | 823.52 |
| War Eagle, south end east abutment of railroad bridge over Turkey Creek; aluminum tablet stamped "875" | 874.210 |
| Alnwick, in front of station; top of rail | 894.2 |
| Wyoming, in front of station; top of rail | 929.0 |
| Wyoming, 0.2 mile east of, 110 feet east of milepost 432, in northeast corner of railroad culvert; aluminum tablet stamped "927" | 926.448 |

**From Wharncliffe west along Norfolk & Western Ry. to Glenalum.**

| | |
|---|---|
| Wharncliffe, 1.1 miles west of, railroad bridge 920; south end of bridge seat of east abutment | 816.12 |
| Glenalum, in front of station; top of rail | 810.1 |
| Glenalum, 240 feet west of station, railroad bridge 921; north end of west abutment | 807.24 |

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**MATEWAN 15′ (WARFIELD 30′) QUADRANGLE.**

[Latitude 37° 30′–37° 45′; longitude 82°–82° 15′.]

**From Sycamore northeast along road via Ragland and Oilville to Island Creek.**

| | Feet. |
|---|---|
| Merrimac, west of, 50 feet north of railroad, on north side of wagon road, in sandstone ledge; aluminum tablet stamped "677 1909" | 676.621 |
| Sycamore, 3 miles north of, summit at head of Lick Creek, on west side of road, 40 feet south of divide, in sandstone ledge; aluminum tablet stamped "1436 W. Va. 1909" | 1,435.173 |
| Sycamore, 3.9 miles north of, on west side of road, 150 feet north of stream crossing, 12 feet southwest of telephone pole marked "U. S. B. M. 867," on sandstone rock; chiseled square | 866.46 |
| Rockhouse, at junction of Pigeon and Rockhouse creeks, 50 feet northwest of footbridge over Pigeon Creek, in sandstone ledge; aluminum tablet stamped "740 1909" | 739.447 |
| Rockhouse, 1.9 miles east of, on north side of creek, 200 feet west of schoolhouse at hollow; point on sandstone outcrop marked "U. S. B. M. 807" | 806.88 |
| Ragland post office, north side of road, 50 feet east of gristmill, 75 feet northwest of Lewis Varney's house; highest point on flat sandstone bowlder 1 by 3 by 4 feet marked "U. S. B. M. 854" | 853.34 |
| Ragland, 0.2 mile east of, on south side of wagon road, 20 feet north of creek, 100 feet east of road, running north to Elk Creek, in sandstone bowlder; aluminum tablet stamped "860 W. Va. 1909" | 859.681 |
| Ragland, 1.8 miles east of, 300 feet west of Christopher Chofin's, on south side of road; point on south end of large sandstone bowlder 4 by 7 by 5 feet marked "U. S. B. M. 950" | 949.60 |
| Ragland, 3.1 miles east of, 75 feet south of road, on south side of creek, 50 feet east of hollow leading south at Harley Curry's place, in large flat sandstone rock; aluminum tablet stamped "1025 W. Va. 1909" | 1,024.305 |
| Ragland, 5.1 miles northeast of, at divide at head of Cow Creek (Mingo-Logan county line); point on west end of sandstone outcrop running directly across divide marked "U. S. B. M. 1709" | 1,708.64 |
| Ragland, 6.1 miles northeast of, south side of road, 300 feet east of Victor Curry's house, in large sandstone bowlder; aluminum tablet stamped "1384 W. Va. 1909" | 1,383.450 |
| Ragland, 8.4 miles northeast of, north side of road, south side of creek, at east end of old log, 50 feet west of foot bridge; highest point on triangular sandstone rock marked "U. S. B. M. 1067" | 1,066.75 |
| Oilville, 0.3 mile east of, on south side of road, 5 feet north of fence, 150 feet west of Dave Robertson's house, in sandstone rock; aluminum tablet stamped "947 W. Va. 1909" | 946.750 |
| Oilville, 2 miles east of, at forks of road at junction of Cow and Island creeks; point on northwest corner of stone property line post; marked "U. S. B. M. 840" | 839.94 |
| Oilville, 2.5 miles east of, 0.5 mile south of junction of Cow and Island creeks, on east side of road, 350 feet north of Lewis Chofin's house, in large sandstone bowlder; aluminum tablet stamped "859 W. Va. 1909" | 858.351 |

**From Three Forks south up Island Creek to point near Calico.**

| | |
|---|---|
| Crane's sawmill, 3.2 miles south of, west side of road, point on flat sandstone rock on edge of stream, marked "U. S. B. M. 1331" | 1,330.38 |

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**From Calico along highway west down Pigeon Creek to Mary Taylor's house, thence southwest to Matewan.**

| | Feet. |
|---|---|
| Calico, 0.8 mile west of, at forks of road, 12 feet south of dead beech tree just east of forks; highest point on sandstone rock, marked "U. S. □ B. M. 1420" | 1,419.34 |
| Calico, 2 miles southwest of, 150 feet east of old church, 50 feet south of road, on south side of creek, in sandstone outcrop; aluminum tablet stamped "1269 W. Va. 1909" | 1,268.738 |
| Calico, 4.8 miles southwest of, 40 feet south of road, 50 feet east of small stream running south, in sandstone rock; aluminum tablet stamped "1119 W. Va. 1909" | 1,118.124 |
| Calico, 7 miles southwest of, on south side of road, 900 feet west of Fulton Hatfield's house; highest point on sharp sandstone rock, marked "U. S. B. M. 1007" | 1,006.01 |
| Varney, 0.9 mile west of, on south side of road, 75 feet west of sandstone bowlder 6 by 6 by 7 feet, in south end of sandstone outcrop crossing road; aluminum tablet stamped "959 W. Va. 1909" | 958.162 |
| Varney, 3.8 miles west of, 5 feet south of road, on north side of creek, 400 feet east of road running southwest to Matewan at Mary Taylor's house, in sandstone rock; aluminum tablet stamped "860 W. Va. 1909" | 858.986 |
| Red Jacket, northeast corner of pumping station at mine, on north face; aluminum tablet stamped "739 W. Va. 1909" | 738.915 |

**From Devon north up Beech Creek and over divide to point near Calico.**

| | |
|---|---|
| Devon, 0.7 mile west of, in north end of west abutment of railroad bridge No. 924 over Beech Creek; aluminum tablet stamped "753 1909" | 752.941 |
| Walker's mill, 2.5 miles northeast of, 115 feet north of mouth of Grapevine Fork, on east side of road, 60 feet northeast of store kept by Smith Hatfield, in sandstone rock; bronze tablet stamped "904 W. Va. 1909" | 903.875 |
| Hinch, 250 feet east of Bill Kenneda's house, on east side of road, 350 feet west of forks of road, in sandstone rock, 30 feet north of elm tree 36 inches in diameter; bronze tablet stamped "1212 W. Va. 1909" | 1,211.516 |
| Hinch, 1.1 miles northeast of, on east side of road, at northeast corner of fence around garden; highest point on sandstone rock 2 by 2 by 2 feet, marked "U. S. B. M. 1505" | 1,504.17 |
| Hinch, 2.9 miles northeast of, 30 feet east of road, on east side of creek, in sandstone outcrop; bronze tablet stamped "1496 W. Va. 1909" | 1,495.385 |
| Hinch, 3.5 miles northeast of, at forks of road, 0.8 mile west of Calico, at Rice Browning's place, 10 feet south of dead beech tree; point on sandstone rock, marked "U. S. B. M. 1420" | 1,419.374 |

**From Glenalum northwest along Norfolk & Western Ry. to East Williamson.**

| | |
|---|---|
| Glenalum, 2 miles west of, in north end of bridge seat of west abutment of railroad bridge 922; aluminum tablet stamped "790" | 789.248 |
| Lindsey, in front of station; top of rail | 783.3 |
| Lindsey, 0.2 mile west of, 240 feet west of milepost 443, on north end of east abutment of railroad bridge 923; chiseled square, marked "U. S. B. M. 779" | 779.06 |
| Lindsey, 1.4 miles west of, 730 feet west of milepost 444, on north side of railroad, in sandstone ledge; aluminum tablet stamped "778" | 777.860 |
| Lindsey, 3.2 miles west of, 75 feet east of milepost 446, on sandstone ledge; chiseled square, marked "U. S. B. M. 760" | 759.32 |
| Devon (O'Keeffe post office), in front of station; top of rail | 762.2 |

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| | Feet. |
|---|---|
| Devon, 0.7 mile west of, in north end of west abutment of railroad bridge 924; aluminum tablet stamped "753" | 752.941 |
| Devon, 1.6 miles west of, on sandstone ledge (railroad bench mark) | 751.44 |
| Cedar, in front of station, top of rail; mail crane marked "U. S. 746" | 745.1 |
| Cedar, 0.4 mile west of, at railroad junction, in northeast corner of north abutment of railroad bridge 2,141 over Tug River; aluminum tablet stamped "743" | 743.050 |
| Vulcan, 1.1 miles west of, at Freeborn's station, in north end of east abutment of railroad bridge over Tug River; aluminum tablet stamped "727" | 726.790 |
| Delorme, in front of station; top of rail | 726.4 |
| Delorme, 0.2 mile west of, at milepost 454, in top of center rack for extra rail; nail, marked "U. S. B. M. 726" (railroad bench mark) | 725.54 |
| Thacker, in front of station; top of rail | 715.2 |
| Thacker, 644 feet northwest of station, in north end of west abutment of railroad bridge 927; aluminum tablet stamped "712" | 711.715 |
| Thacker, 3.4 miles northwest of, in west end of bridge seat of, north abutment of Pike Collier electric railroad bridge over Tug River; aluminum tablet stamped "701" | 700.312 |
| Northwest corner of same abutment (railroad bench mark) | 704.20 |
| Matewan, north end of east abutment of railroad bridge 928; chisel mark (railroad bench mark) | 696.08 |
| Matewan, in front of station; top of rail | 697.7 |
| State line, West Virginia-Kentucky, in center of railroad bridge 929 over Tug River; top of rail | 695.14 |
| Matewan, 1.4 miles northwest of north end of west abutment of railroad bridge 929 over Tug River, Kentucky side of bridge, 100 feet east of Hatfield tunnel; chiseled square, marked "U. S. B. M. 693" | 692.70 |
| Matewan, 1.6 miles northwest of, in north end of west abutment of railroad bridge 930, State line bridge over Tug River; aluminum tablet stamped "691" | 690.257 |
| Merrimac, in front of station; top of rail | 680.5 |
| Merrimac, 0.2 mile northwest of, at coal tipple, in southwest foundation for water tank; aluminum tablet stamped "680" | 679.879 |
| Merrimac, 1.3 miles northwest of, 75 feet south of milepost 466, on sandstone bowlder; chiseled square | 674.10 |
| Merrimac, 2.2 miles northwest of, 300 feet east of milepost 467, 75 feet north of railroad, on north side of county road, in sandstone ledge; aluminum tablet stamped "677" | 676.621 |

## WILLIAMSON QUADRANGLE.

[Latitude 37° 30′–37° 45′; longitude 82° 15′–82° 30′.]

### From Williamson along Norfolk & Western Ry. to Nolan.

| | |
|---|---|
| Williamson, 200 feet east of station, at southwest corner of guardrail over subway, on sandstone coping; chiseled square marked "665" | 664.17 |
| Williamson, at southwest corner of intersection of Fifth Avenue and Harvey Street, in top of stone post; bronze meridian tablet stamped "675" | 674.582 |
| Williamson, at courthouse; U. S. Army engineers' bench mark No. 30 (Army engineers' elevation 660.774) | 660.276 |
| Williamson, 2.2 miles northwest of, 826 feet west of tunnel, on north side of railroad, on east side of county road crossing, east end of culvert; chiseled square, marked "657" | 656.14 |

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| | Feet. |
|---|---|
| Chattaroy, 400 feet east of station, 35 feet east of milepost 474, on north side of railroad, in sandstone ledge; aluminum tablet stamped "654".. | 653.768 |
| Chattaroy, in front of station; top of rail..... | 654.8 |
| Hatfield, in front of station; top of rail..... | 652 |
| Hatfield, 0.8 mile northwest of, 500 feet east of milepost 477, 60 feet north of railroad, east side of county road, in sandstone ledge; aluminum tablet stamped "650"..... | 649.815 |
| Nolan, 75 feet north of station, on sandstone bowlder; chiseled square..... | 647.87 |

## NAUGATUCK QUADRANGLE.

[Latitude 37° 45′–38°; longitude 82° 15′–82° 30′.]

### From Nolan northwest along Norfolk & Western Ry. to Yorkville.

| | |
|---|---|
| Nolan, 2.3 miles northwest of, 130 feet northwest of road crossing, 100 feet west of milepost 480, 70 feet north of deserted house, in sandstone bowlder 15 by 108 by 10 feet; aluminum tablet stamped "645"..... | 644.657 |
| Naugatuck, at east end of siding, 25 feet south of railroad, 100 feet west of old road crossing, in sandstone culvert; aluminum tablet stamped "638". | 637.608 |
| Naugatuck, 0.9 mile northwest of, 10 feet south of road crossing, on sandstone rock; chiseled square, warning post marked "U. S. B. M. 635".... | 634.40 |
| Naugatuck, 1.9 miles northwest of, 200 feet north of railroad crossing, 75 feet west of wagon road, in sandstone rock; aluminum tablet stamped "639"..... | 638.368 |
| Naugatuck, 3.4 miles northwest of, 60 feet east of tunnel, on south side of tracks, on sandstone rock; chiseled square..... | 629.84 |
| Kermit, at road crossing, at milepost east of, on north side of railroad, on west side of wagon road, on sandstone rock; chiseled square, marked "628"..... | 627.89 |
| Kermit, 600 feet east of station, on west side of sandstone culvert, in third tier of stone below top; aluminum tablet stamped "623"..... | 622.500 |
| Kermit, in front of station; top of rail..... | 627.7 |
| Kermit, 2.5 miles northwest of, 100 feet north of railroad, 300 feet northeast of railroad crossing, 50 feet north of wagon road, 5 feet south of gate, in sandstone rock; aluminum tablet stamped "621"..... | 620.365 |
| Crum, 0.3 mile east of, 50 feet north of railroad, on south side of county road, 100 feet northwest of milepost "Naug. 11," in sandstone bowlder; aluminum tablet stamped "619"..... | 618.742 |
| Crum, 1.95 miles northwest of, 750 feet west of mouth of tunnel, on north end of west abutment of railroad bridge 755 over Bull Creek; chiseled square, marked "611"..... | 610.81 |
| Jennie, 10 feet south of northwest entrance to railroad tunnel, 150 feet east of road crossing; aluminum tablet stamped "615"..... | 614.366 |
| Millet, 1.6 miles northwest of, in east end of north abutment of railroad bridge 756, over Camp Creek; aluminum tablet stamped "603"..... | 602.040 |
| Webb, in front of station; top of rail..... | 600.3 |
| Webb, 1.8 miles northwest of, 105 feet north of milepost "Naug. 20," on north side of wagon road, on east side of Coon Hollow, in sandstone rock; aluminum tablet stamped "594"..... | 593.925 |

### Near Preston.

| | |
|---|---|
| Preston, 0.6 mile east of, 800 feet east of Wells Branch station, in northwest abutment of bridge 975 over Missouri Branch mouth; aluminum tablet stamped "704"..... | 704.565 |

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**From Naugatuck north along old line of Norfolk & Western Ry. to point 0.8 mile north of Canterbury.**

| | Feet. |
|---|---|
| Naugatuck, 230 feet north of station, on northeast foundation for east water tank; chiseled square, marked "636" | 635.54 |
| Blocton, in front of station; top of rail | 633.7 |
| Blocton, 0.3 mile east of, 110 feet east of road crossing, 8 feet south of railroad track; chiseled square on large sandstone rock, marked "U. S. B. M. 637" | 636.53 |
| Blocton, 1.7 miles east of, 10 feet north of railroad; chiseled square on sandstone ledge, marked "640" | 639.86 |
| Blocton, 2.4 miles east of, 1,150 feet west of Eugene post office, 35 feet south of road crossing, in sandstone rock; aluminum tablet stamped "634" | 633.780 |
| Eugene, in front of station; top of rail | 638.7 |
| Lenore, in front of station; top of rail | 641 |
| Lenore, 1 mile northeast of, 12 feet west of railroad track; chiseled square on sandstone rock in small hollow to west | 643.21 |
| Rapp, in front of station; top of rail | 646 |
| Lenore, 2.6 miles northeast of; top of east end of north abutment of railroad bridge 939 | 666.81 |
| Lenore, 3 miles north of, in east bridge seat of north abutment of railroad bridge 941; aluminum tablet stamped "672" | 671.946 |
| Canterbury, at water tank; top of rail | 686 |
| Canterbury, 0.8 mile north of, railroad bridge 942 over Tom Run; west end of north abutment | 699.08 |

**From point 2.2 miles south of Breading northwest along Norfolk & Western Ry. to Preston.**

| | |
|---|---|
| Kirk, in front of station; top of rail | 873 |
| Buttercup, in front of station; top of rail | 867 |
| Breeden, 2.2 miles southeast of; top of east end of south abutment of railroad bridge 951 | 856.11 |
| Breeden, 1.1 miles southeast of, 5 feet west of railroad track, in cut on sandstone rock; chiseled square | 837.75 |
| Breeden, 800 feet east of, in top of south end of east abutment of railroad bridge 956; aluminum tablet stamped "818" | 818.278 |
| Breeden, in front of station; top of rail | 816 |
| Wilsondale, 3.3 miles southeast of, on south end of east abutment of railroad bridge 960, at branch to north; chiseled square | 798.26 |
| Wilsondale, 2.7 miles southeast of, on south end of east abutment of railroad bridge 964 over Poor Branch; chiseled square | 786.32 |
| Mingo-Wayne county line; top of rail, marked "780" | 780 |
| Wilsondale, 1.8 miles southeast of, 8 feet north of railroad and 740 feet west of Mingo-Wayne county line, in sandstone ledge; aluminum tablet stamped "781" | 780.879 |
| Wilsondale, 300 feet west of, 10 feet north of railroad track; chiseled square on sandstone rock | 761.24 |
| Doane, 3 miles southeast of, in top of west bridge seat of south abutment of railroad bridge 967 over Gourd Branch; aluminum tablet stamped "746" | 745.801 |
| Doane, 2.6 miles southeast of, 30 feet south of railroad track, 100 feet west of milepost "N 514;" chiseled square on sandstone rock | 718.68 |
| Doane, 1.4 miles southeast of, on west end of railroad bridge 971 over Twelvepole Creek; chiseled square | 738.66 |
| Doane, 0.4 mile east of, 10 feet north of railroad track, in sandstone rock; aluminum tablet stamped "722" | 722.275 |

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| | Feet. |
|---|---|
| Doane in front of station; top of rail | 721 |
| Wells Branch, 2 miles southeast of, on east side of north abutment of railroad bridge 974 over Arkansas Branch; chiseled square | 717.77 |
| Wells Branch, 1.1 miles southeast of, 10 feet north of railroad track; chiseled square on sandstone ledge | 711.54 |
| Preston, 0.6 mile east of, 800 feet east of Wells Branch station, in northwest abutment of bridge 975 over mouth of Missouri Branch; aluminum tablet stamped "704" | 704.565 |

**From Lenore station east along country road up Pigeon Creek 3 miles.**

| | |
|---|---|
| Lenore, 115 feet north of station; chiseled square on sandstone ledge | 649.98 |
| Lenore, 1.6 miles east of, 100 feet southeast of dwelling house, 6 feet south of center of road; chiseled square on sandstone rock | 637.16 |
| Lenore, 2 miles east of, 5 feet south of county road; chiseled square on sandstone rock | 655.57 |
| Lenore, 3 miles east of, 5 feet north of county road; chiseled square on sandstone ledge | 652.93 |

## HOLDEN QUADRANGLE.

[Latitude 37° 45′–38°; longitude 82°–82° 15′.]

**From point 2.2 miles north of Canterbury north along old line of Norfolk & Western Ry. to point 0.2 mile east of Kirk.**

| | |
|---|---|
| Canterbury, 2.2 miles north of, 580 feet east of mouth of hollow from north, 5 feet north of railroad track; chiseled square on sandstone ledge | 774.98 |
| Canterbury, 3.1 miles north of, 5 feet north of railroad track, 250 feet west of hollow to north, in sandstone rock; aluminum tablet stamped "818" | 818.036 |
| Canterbury, 4 miles northeast of, 100 feet east of large hollow to north, 8 feet south of railroad track; chiseled square on sandstone ledge | 865.87 |
| Hale, at southwest corner of station; top of sandstone | 909.38 |
| Dingess, 1.4 miles south of, 8 feet west of railroad, in sandstone ledge; aluminum tablet stamped "949" | 948.953 |
| Dingess, 115 feet east of station, east side of wagon road; chiseled square on sandstone ledge | 1,006.92 |
| Kirk, 3.4 miles southeast of, 8 feet south of railroad, 200 feet south of junction of Dingess Trace and Twelvepole Creek; bronze tablet stamped "944" | 944.305 |
| Kirk, 3.4 miles southeast of, 8 feet south of railroad track; chiseled square on sandstone rock | 943.81 |
| Kirk, 2.4 miles southeast of, chiseled square on top of north end of west abutment of railroad bridge | 908.35 |
| Kirk, 1.4 miles east of; chiseled square on north end of east abutment of railroad bridge 945 | 894.11 |
| Kirk, 0.2 mile east of, in top of north bridge seat of east abutment of railroad bridge 948; aluminum tablet stamped "873" | 872.910 |

**From point 3.4 miles southeast of Kirk at forks of Dingess Trace and Twelvepole Creek up Dingess Trace over country road northwest to Chapmanville, thence southeast to point 2.2 miles south of Chapmanville, thence to point 1 mile west of Logan, thence to point 4 miles east of Lenore.**

| | |
|---|---|
| Kirk, 3.4 miles southeast of, 200 feet south of Dingess Trace and Twelvepole Creek, 8 feet south of railroad, in sandstone rock; bronze tablet stamped "944" | 944.305 |

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| | Feet. |
|---|---|
| Dingess, 3.1 miles north of, on south side of road, 100 feet east of dwelling house; chiseled square on sandstone ledge | 1,075.24 |
| Dingess, 4.1 miles north of, 5 feet west of county road; chiseled square on sandstone ledge | 1,209.39 |
| Dingess, 5.1 miles north of, 16 feet east of center of wagon road, 1,400 feet south of Coon Branch, in sandstone ledge; aluminum tablet stamped "956" | 955.727 |
| Whirlwind, 2 miles southwest of, on south side of road; chiseled square on sandstone ledge | 967.28 |
| Whirlwind, 0.25 mile north of, 150 feet north of road forks at junction of Bull Work and Big Hart creeks, 20 feet east of road in creek bed, in sandstone ledge; aluminum tablet stamped "723" | 722.942 |
| Whirlwind, 1.3 miles north of; top of sandstone rock at hollow to left of road | 681.55 |
| Whirlwind, 2 miles north of, 1,000 feet south of Hoover Fork of Big Hart Creek, east side of road and east side of creek; chiseled square on sandstone ledge | 665.94 |
| Whirlwind, 3.1 miles north of, 200 feet south of forks of Buck Fork and Big Hart Creek, east side of creek; aluminum tablet stamped "648" | 647.705 |
| Junction of Smokehouse Fork and Big Hart Creek, 1.2 miles east of, on west side of creek bed, 3 feet above surface of water; chiseled square on sandstone rock | 652.48 |
| Junction of Smokehouse Fork and Big Hart Creek, 2.2 miles east of, in sandstone ledge, north side of county road, 200 feet northwest of house and store; aluminum tablet stamped "682" | 682.126 |
| Junction of Smokehouse Fork and Big Hart Creek, 3.4 miles east of; chiseled square on sandstone rock north side of wagon road | 700.00 |
| Shively, 1.8 miles north of, 50 feet west of road forks at junction of Trace and Smokehouse Forks, 13 feet inside fence around small bottom, in sandstone rock; aluminum tablet stamped "758" | 758.012 |
| Shively, 2.5 miles north of, on south side or road, 50 feet west of divide between Smokehouse Fork and Crawley Creek; chiseled square on sandstone rock | 984.10 |
| Shively, 2.8 miles north of, 5 feet north of county road; chiseled square on sandstone rock | 856.94 |
| Shively post office, 3.8 miles north of, 20 feet west of center of road; chiseled square on sandstone rock | 647.98 |
| Forks of Pitt Branch and Crawley Creek, 180 feet east of, 25 feet south of wagon road, in large sandstone rock; bronze tablet stamped "635" | 635.049 |
| Chapmanville, 3 miles west of, 500 feet north of Striker Fork; chiseled square on sandstone rock 10 feet east of road | 622.35 |
| Chapmanville, 1.3 miles west of, 12 feet north of railroad track; chiseled square on sandstone rock | 641.73 |
| Chapmanville, in south side of southeast concrete pillar for railroad station platform; bronze tablet stamped "647" | 646.795 |
| Chapmanville, 2.1 miles south of, 35 feet north of railroad crossing, 5 feet west of railroad track; chiseled square on sandstone rock | 652.42 |
| Chapmanville, 2.8 miles south of, 500 feet west of Godby crossing, 8 feet north of railroad track, in sandstone ledge; bronze tablet stamped "655" | 653.808 |
| Logan, 1 mile west of, on south side of east abutment of railroad bridge over Island Creek, 200 feet north of forks of Island Creek and Copperas Mine Fork; chiseled square | 666.52 |



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| | Feet. |
|---|---|
| Logan, 2 miles southwest of, 8 feet south of railroad track; top of sandstone rock | 676.40 |
| Logan, 2.8 miles southwest of, 300 feet northwest of mouth of Whitman Fork, in south bridge seat of west abutment of railroad bridge over Copperas Mine Fork of Island Creek; bronze tablet stamped "690" | 689.367 |
| Holden, 300 feet east of station, north end of west abutment of wagon bridge over Truce Fork at mouth; chiseled square marked "735" | 733.63 |
| Holden, 1 mile southwest of, on west side of stream, 350 feet north of hollow to right of road; chiseled square on sandstone ledge | 802.17 |
| Holden, 1.6 miles southwest of, on north side of stream, 250 feet north of hollow to left of road; chiseled square on sandstone ledge | 850.77 |
| Holden, 1.9 miles southwest of, on north side of road, 100 feet north of stream forks to north, 150 feet east of house, in sandstone rock; bronze tablet stamped "885" | 883.610 |
| Holden, 2.7 miles southwest of, 200 feet west of stream forks, at foot of hill; point on sandstone rock | 1,021.17 |
| Holden, 3.5 miles southwest of, 90 feet west of divide between Trace Fork of Island Creek and Trace Fork of Pigeon Creek; chiseled square on sandstone rock | 1,401.79 |
| Holden, 4.5 miles southwest of, 7 feet north of center of wagon road, 200 feet west of hollow to right, in sandstone ledge; bronze tablet stamped "1033" | 1,031.527 |
| Holden, 5.9 miles southwest of, 250 feet southeast of schoolhouse, 35 feet south of road; chiseled square on sandstone rock | 877.50 |
| Holden, 7.7 miles southwest of, 90 feet south of road, 300 feet west of old splash dam; chiseled square on sandstone rock | 787.03 |
| Holden, 8.2 miles southwest of, 1,700 feet southeast of house at hollow to right, in sandstone ledge 20 feet east of creek bed and on east side of road; bronze tablet stamped "762" | 760.773 |
| Myrtle, 1.5 miles north of, 300 feet west of large hollow to right, on sandstone rock on north side of creek | 722.31 |
| Myrtle, 0.8 mile west of, on north side of creek, between creek and road; chiseled square on sandstone rock | 690.81 |
| Myrtle, 2.3 miles west of, on south side of creek and just opposite hollow to right of road; chiseled square on sandstone rock | 662.42 |
| Forks of Trace Fork and Pigeon Creek, 4 miles east of Lenore, on north side of county road, in sandstone ledge; aluminum tablet stamped "645" | 644.971 |
| Lenore, 4 miles east of, 80 feet east of forks of Trace Fork and Pigeon Creek, on north side of county road, in sandstone ledge; aluminum tablet stamped "645" | 644.971 |

## LOGAN QUADRANGLE.

[Latitude 37° 45′–38°; longitude 81° 45′–82°.]

**From point 0.4 mile north of Pecks Mill south along Chesapeake & Ohio Ry. to Logan.**

| | |
|---|---|
| Pecks Mill, 0.4 mile north of, 10 feet east of railroad track; chiseled square on sandstone ledge | 661.07 |
| Pecks Mill, in front of station; top of rail | 660 |
| Pecks Mill, 1 mile south of, 10 feet east of railroad track; chiseled square on sandstone ledge | 661.15 |
| Ralumco, in front of station; top of rail | 661 |
| Pecks Mill, 2.1 miles south of, 700 feet south of Ralumco station, 10 feet east of railroad track, in sandstone ledge; bronze tablet stamped "662" | 660.759 |
| Henlawsen, in front of station; top of rail | 667 |

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| | Feet. |
|---|---|
| Henlawsen, 0.6 mile south of, 10 feet east of railroad track; chiseled square on sandstone rock | 666.86 |
| Peach Creek, in front of station; top of rail | 663.7 |
| Peach Creek station, 0.4 mile south of, railroad bridge over stream to east; northeast corner of south abutment | 668.41 |
| Logan, in front of station; top of rail | 674.8 |
| Logan, in south side of west entrance to courthouse; bronze tablet stamped "683" | 681.606 |
| Logan, stone step of Gyan Drug Co.'s building, marked "680" | 679.070 |

**From Madison south to Jeffery, thence southwest to Pecks Mill, thence south up Guyandot River to Man.**

| | |
|---|---|
| Hewett, 300 feet above mouth of Hewett Creek, opposite schoolhouse on south side of creek, in ledge of rock (reported in 1911 as covered by deep layer of gravel); copper bolt stamped "U. S. G. S. 767" | 766.904 |
| Pecks Mill, 0.25 mile south of post office, on northwest side of Mill Creek, 300 feet above mouth, in northwest corner of huge bowlder; copper bolt stamped "U. S. G. S. 653" (reported 1911 as destroyed) | 652.830 |
| Logan, in northeast corner of courthouse wall; bronze tablet stamped "678" (reported 1911 as destroyed) | 678.447 |
| Man, 5 miles northwest of, opposite mouth of Rich Creek, 20 feet north of Methodist Episcopal Church, in rock; copper bolt stamped "U. S. G. S. 725" | 725.119 |
| George McDonald's field, 1,500 feet below his house, on south side of Guyandot River, in root of cedar tree; nail (bench mark of Norfolk & Western R. R., elevation 724.465) | 731.50 |

**From Man northeast up Buffalo Creek (single spur line; elevation unreliable).**

| | |
|---|---|
| Man, 2.5 miles northeast of, west side of Buffalo Creek, 3 miles above mouth of Buffalo Creek; copper bolt stamped "U. S. G. S. 808" | 809.080 |

**From point 0.4 mile north of Pecks Mill south along Chesapeake & Ohio Ry. to Logan.**

| | |
|---|---|
| Pecks Mill, 0.4 mile north of, 10 feet east of railroad track; chiseled square on sandstone ledge | 661.07 |
| Pecks Mills, in front of station; top of rail | 660 |
| Pecks Mill, 1 mile south of, 10 feet east of railroad track; chiseled square on sandstone ledge | 661.15 |
| Ralumco, in front of station; top of rail | 661 |
| Pecks Mill, 2.1 miles south of, 700 feet south of Ralumco station, 10 feet east of railroad track, in sandstone ledge; bronze tablet stamped "662" | 660.759 |
| Henlawsen, in front of station; top of rail | 667 |
| Henlawsen, 0.6 mile south of, 10 feet east of railroad track; chiseled square on sandstone rock | 666.86 |
| Peach Creek, in front of station; top of rail | 663.7 |
| Peach Creek station, 0.4 mile south of, railroad bridge over stream to east; northeast corner of south abutment | 668.41 |
| Logan, in front of station; top of rail | 674.3 |
| Logan, in south side of west entrance to courthouse; bronze tablet stamped "683" | 681.606 |
| Logan, Gyan Drug Co.'s building; stone step, marked "680" | 679.070 |
| Logan, 1 mile west of, on south side of east abutment of railroad bridge over Island Creek, 200 feet north of forks of Island Creek and Coppers Mine Fork; chiseled square | 666.57 |

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**From Logan along highway southeast to Rolfe, thence east and north to Jeffery, thence west to Pecks Mill.**

| | Feet. |
|---|---|
| Logan, 1.6 miles east of, at Stallings station; joint of south rail at road crossing, marked "676" | 676.21 |
| Logan, 2.9 miles east of, 4 feet west of road crossing, 250 feet east of two houses, 100 feet east of road forks; joint of south rail, marked "691" | 690.45 |
| Logan, 4 miles southeast of, 8 feet east of wagon road, in west end of concrete railroad culvert; bronze tablet stamped "686" | 685.634 |
| Logan, 5.6 miles southeast of, on north end of east abutment of railroad bridge over Rum Creek; chiseled square, marked "695" | 694.84 |
| Rolfe, 1.5 miles east of, 30 feet north of road, at forks of creek, in rock ledge; bronze tablet stamped "751" | 750.555 |
| Rolfe, 2.5 miles east of, at second right-hand fork of Rum Creek, 30 feet north of wagon road; bench mark cut in root of sycamore tree, marked "826" | 825.79 |
| Rolfe, 3.4 miles east of, 500 feet north of house in mouth of hollow to south, opposite hollow to north, on sandstone ledge; chiseled square, marked "891" | 890.81 |
| Rolfe, 4.6 miles east of, 6 feet north of road, 2 feet above creek bed, in sandstone ledge; bronze tablet stamped "979" | 979.095 |
| Rolfe, 6 miles east of, 20 feet north of road, on large sandstone bowlder in creek; chiseled square marked, "1100" | 1,099.78 |
| Rolfe, 7.1 miles east of, 15 feet north of road, on large sandstone bowlder; chiseled square marked, "1230" | 1,230.32 |
| Rolfe, 7.9 miles east of, 4 feet north of road, in large sandstone bowlder; bronze tablet stamped "1471" | 1,471.213 |
| Rolfe, 8.6 miles east of, 500 feet east of house in mouth of hollow to south, 2 feet north of trail, chiseled square on sandstone bowlder, marked "1685" | 1,684.53 |
| Rolfe, 9.1 miles east of, top of ridge at head of Rum Creek, 4 feet north of trail; nail in top of oak stump, marked "2040" | 2,039.70 |
| Rolfe, 9.6 miles east of, 15 feet west of trail, in divide; nail in root of chestnut tree, marked, "2060" | 2,059.45 |
| Rolfe, 11.3 miles northeast of, 5 feet west of trail; nail in root of beech tree, marked "1399" | 1,398.54 |
| Rolfe, 12.1 miles northeast of, 40 feet below forks and north of stream, 400 feet south of house, on rock ledge; chiseled square marked, "1270" | 1,269.98 |
| Rolfe, 12.7 miles northeast of, 80 feet north of house at hollow to right, 100 feet west of forks, 4 feet south of trail, in sandstone bowlder; bronze tablet stamped "1206" | 1,205.586 |
| Rolfe, 13.6 miles northeast of, at mouth of Garland Fork of Spruce, 300 feet east of house, 10 feet south of trail; nail in root of oak tree, marked "1117" | 1,116.97 |
| Rolfe, 15.6 miles northeast of, 200 feet east of house, at mouth of hollow to north, 4 feet east of road, nail in west root of ash tree, marked "1032" | 1,031.28 |
| Seng, 50 feet east of road, 3 feet east of stream, 220 feet southeast of house, in rock cliff; bronze tablet stamped "990" | 989.087 |
| Seng, 1.4 miles north of, at mouth of Pigeon Roost Branch, 40 feet southwest of store, 150 feet northeast of house, east of road; chiseled square on bowlder, marked "958" | 957.33 |
| Seng, 3.9 miles northeast of, at foot of bank, south side of road, 1,000 feet northeast of schoolhouse, in rock cliff; bronze tablet stamped "922" | 921.347 |
| Seng, 4.7 miles northeast of, east side of north end of railroad bridge over Seng Creek; top of bolt, marked "896" | 895.21 |
| Seng, 5.2 miles north of, 200 feet north of railroad bridge over Spruce Fork, 8 feet west of track, in rock ledge; bronze tablet stamped "892" | 891.311 |

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| | Feet. |
|---|---|
| Bend, 300 feet east of post office, 800 feet south of Beach Creek, west of track, in rock ledge east of stream; hole where copper bolt, stamped "848," formerly was. (Elevation by corrected levels of 1896=845.233) | 847.083 |
| Bend, 1.5 miles north of, 50 feet west of railroad track; point of rock, marked "825" | 824.94 |
| Clothier, on northwest corner of station platform; iron bolt, marked "806" | 805.60 |
| Jeffery, 100 feet west of railroad bridge over Hewetts Creek, 250 feet south of two stores, in rock cliff; bronze tablet stamped "774" | 773.357 |
| Jeffery, 1.4 miles west of, 6 feet north of road, 140 feet southeast of house, north of stream; chiseled square on large bowlder, marked "801" | 800.72 |
| Jeffery, 2.2 miles west of, 150 feet east of Missouri Branch of Hewetts Creek, 10 feet north of stream, in rock ledge; bronze tablet stamped "822" | 821.256 |
| Jeffery, 3.8 miles west of, 200 feet northeast of house, at mouth of hollow to left, 50 feet north of road, on rock ledge; chiseled square, marked "883" | 882.09 |
| Jeffery, 5 miles west of, 150 feet south of house, 10 feet south of road, nail in root of beech tree; marked "—2—" | 928.42 |
| Lake, 30 feet northwest of store, 25 feet northeast of house, 80 feet north of road, in rock ledge; bronze tablet stamped "969" | 967.934 |
| Lake, 1.4 miles west of, 40 feet north of house, 4 feet north of road, at mouth of Raccoon Branch; nail in root of beech tree, marked "1072" | 1,071.31 |
| Divide between Hewett and Big creeks, marked "1230" | 1,229 |
| Lake, 2.4 miles west of, 20 feet west of store, east of road; point of rock, marked "972" | 971.12 |
| Divide between Big Creek and Mill Creek, marked "1090" | 1,089 |
| Lake, 3.4 miles west of, 30 feet south of road, nail in root of beech tree, marked "803" | 802.60 |
| Lake, 3.7 miles west of, 400 feet east of house, in mouth of hollow to north, 30 feet north of road, in rock ledge; bronze tablet stamped "775" | 774.446 |
| Lake, 4.9 miles west of, 30 feet south of road, at mouth of hollow to north, on rock ledge; chiseled square, marked "715" | 714.37 |

## LOUISA QUADRANGLE.

[Latitude 38°-38° 15′; longitude 82° 30′-82° 45′.]

### From Yorkville northwest along Norfolk & Western Ry. to Louisa, Ky.

| | |
|---|---|
| Yorkville, 600 feet east of post office, in east end of south abutment of railroad bridge 758 over Lost Creek; aluminum tablet stamped "589" | 588.666 |
| Glenhayes, in front of station; top of rail | 590.6 |
| Glenhayes, 1.2 miles northwest of, 150 feet east of milepost "Naug. 26," on west end of sandstone culvert; chiseled square, marked "588" | 587.08 |
| Glenhayes, 2.25 miles northwest of, 50 feet north of milepost "Naug. 27," in sandstone bowlder; aluminum tablet stamped "595" | 594.074 |
| Saltpeter, in front of station; top of rail | 582.2 |
| Saltpeter, 200 feet northwest of station, 75 feet north of railroad, on south side of wagon road, in sandstone bowlder 20 by 15 by 8 feet; aluminum tablet stamped "574" | 573.853 |
| Saltpeter, 1.9 miles northwest of, 250 feet north of railroad, 500 feet northeast of milepost "Naug. 32," in Jerry Bartram's field, in sandstone rock; aluminum tablet stamped "579" | 578.133 |
| Saltpeter, 3.2 miles northwest of, on north end of west abutment of railroad bridge 759; chiseled square | 575.13 |
| Fort Gay, on west end of north abutment of toll bridge over Big Sandy River; chiseled square | 576 |
| Louisa, Ky., at lock No. 3 (United States Army Engineer's bench mark No. 13, Engineers' elevation, 569.570 feet) | 568.981 |

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## Bald Knob, Beckley, Eccles, Flat top, Mullens, and Pineville quadrangles.

### BOONE, LOGAN, MERCER, RALEIGH, AND WYOMING COUNTIES.

The leveling was done in Bald Knob quadrangle in 1896 by Hargraves Wood, in 1910 by J. B. Metcalfe, jr., in 1911 by E. E. Witherspoon; in Beckley quadrangle in 1911 by Witherspoon, in 1912 by L. F. Biggs; in Eccles quadrangle in 1911 by Witherspoon and Fred McLaughlin, in 1912 by Biggs; in Flat top quadrangle in 1911 by Witherspoon and McLaughlin, in 1913 by K. W. Trimble; in Mullens quadrangle in 1910 by Metcalfe, in 1909 by S. E. Taylor; in Pineville quadrangle in 1910 by Metcalfe, and in 1896–7 by Hargraves Wood.

### BALD KNOB QUADRANGLE.

[Latitude 37° 45′–38°; longitude 81° 30′–81° 45′.]

#### Near Launa.

| | Feet. |
|---|---|
| Launa, 1.8 miles southeast of, 250 feet west of road to north, 150 feet west of creek crossing, south side of road; chiseled cross on flat rock, marked "1016" | 1,015.27 |
| Launa, 400 feet east of post office, south side of road; chiseled cross on flat rock, marked "1017" | 1,017.22 |
| Launa, 1 mile west of, 0.5 mile north of mouth of Hazy Creek, west side of Marsh Fork of Coal River, in bowlder; bronze tablet stamped "955" | 954.950 |

#### From point near Dorothy west to Jarrolds Valley.

| | |
|---|---|
| Dorothy, 2.7 miles west of, 320 feet east of milepost C 5, about 500 feet east of east end of curve to north, 15 feet south of track; chiseled cross on rock, marked "879" | 878.55 |
| Leevale, 0.2 mile west of station, 800 feet west of milepost C 6, 50 feet west of head block of switch, in curve to left, 10 feet south of track, on bowlder; chiseled cross marked "848" | 847.51 |
| Jarrolds Valley, about 400 feet northeast of station, 10 feet north of railroad track, at end of switch, in line post between Raleigh and Boone counties; spike marked "839." (This bench mark was disturbed by railroad wreck.) | 837.89 |
| Jarrolds Valley, 1 mile south of, on northeast corner of concrete abutment of bridge over Little Marsh Fork, in lower face; aluminum tablet stamped "855" | 855.404 |

#### From Echart north down Pond Fork of Little Coal River via Bald Knob and Crook to mouth of Robinson Creek.

| | |
|---|---|
| Echart, east bank of Pond Fork of Little Coal River, opposite mouth of Skin Fork, in ledge of rock; copper bolt stamped "U. S. G. S. 1423" | 1,423.692 |
| Bald Knob, east side of valley opposite Eddy Workman's, in bowlder; copper bolt stamped "U. S. G. S. 1101" | 1,101.554 |
| Bald Knob, 3.5 miles northwest of, north side of Cow Creek, 0.75 mile from mouth of Cow Creek, 800 feet from James Gunnoe's, in ledge of rock; copper bolt stamped "U. S. G. S. 1039" | 1,039.510 |

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**From Gordon east up West Fork to Browns Branch (single spur line).**

| | Feet. |
|---|---|
| Gordon, north side of West Fork, 1,000 feet east of junction of West Fork and Pond Fork to form Little Coal River, in rock; copper bolt stamped "U. S. G. S. 808" | 809.190 |
| Gordon, 2.5 miles east of, on West Fork, 800 feet below Browns Branch, west of road a little above and nearly opposite small water mill, in ledge of rock; copper bolt stamped "U. S. G. S. 884" | 884.503 |

**From mouth of Whiteoak Creek up Coal River to Hazy Creek.**

| | |
|---|---|
| Orange, 0.5 mile north of post office, south side of Whiteoak Creek, 0.2 mile east of mouth, 300 feet west of mouth of Little Whiteoak Creek, in rock cliff; aluminum tablet stamped "734" | 732.963 |
| Mouth of Whiteoak Creek, 1.6 miles south of, 300 feet east of sharp bend in road to east, 2 feet south of road; cross on ledge of rock | 748.79 |
| Mouth of Whiteoak Creek, 2.8 miles south of, 3 feet west of river; nail in root of sycamore tree | 751.27 |
| Mouth of Whiteoak Creek, 6.3 miles south of, 6 feet east of road, 100 feet south of ford over river, about 0.25 mile south of Serg Creek; cross on rock | 788.95 |
| Mouth of Whiteoak Creek, 7.3 miles south of, northwest corner of concrete culvert of Chesapeake & Ohio Ry. over Bear Hollow, in top face; bronze tablet stamped "817" | 815.983 |
| Jarrolds Valley, 1 mile south of, on northeast corner of concrete abutment of bridge over Little Marsh Fork, in lower face; aluminum tablet stamped "855" | 855.404 |
| Jarrolds Valley, 3.2 miles south of, 6 feet west of railroad grade, 150 feet north of culvert, in sharp curve to right; cross on rock | 900.06 |
| Jarrolds Valley, 3.8 miles south of, on east top face of culvert over branch, in concrete; aluminum tablet stamped "918" | 916.834 |
| Jarrolds Valley, 5.5 miles south of, about 0.5 mile above Hecla post office, 6 feet east of road and between same and Marsh Fork; spike in root of beech tree | 942.27 |
| Jarrolds Valley, 6.1 miles south of, 200 feet west of road, about 10 feet west of Marsh Fork, about 0.25 mile north of Hazy Creek, in ledge of rock, near old sycamore snag; bronze tablet stamped "956" | 954.950 |

## BECKLEY QUADRANGLE.

[Latitude 37° 45-38°; longitude 81°-81° 15'.]

**From Packs east along highway and Chesapeake & Ohio Ry. to Thurmond.**

| | |
|---|---|
| Packs Branch, 0.3 mile east of, on sharp curve to south, on south abutment of culvert over small stream; chiseled cross, marked "1703" | 1,702.07 |
| Packs Branch, 1 mile east of, 0.3 mile west of Upper Packs Branch School, 150 feet south of road, 40 feet south of Packs Branch, 80 feet north of railroad, in large sandstone rock; bronze tablet stamped "1768" | 1,767.053 |
| Mount Hope, 2.2 miles west of, 60 feet west of end of tunnel, 7 feet south of track; chiseled cross on ledge of rock, marked "1865" | 1,864.41 |
| Mount Hope, 0.9 mile west of, 250 feet west of head block of switch, on curve to south, 50 feet south of road, 15 feet north of track; chiseled cross on rock, marked "1727" | 1,726.01 |
| Mount Hope, 0.1 mile north of, 100 feet south of Kanawha, Glen Jean & Eastern R. R. track, 30 feet east of road junction, 10 feet south of Sugar Creek Mining Co.'s store, in sandstone ledge; bronze tablet stamped "1708" | 1,707.656 |
| Mount Hope, Bradley's drug store, in the sidewalk in front; a brass plate stamped "1738" | 1,738.094 |

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| | Feet. |
|---|---|
| Mount Hope, 2.4 miles north of, 0.3 mile south of Sun, 800 feet north of milepost T 8, on curve to west, 10 feet west of railway; chiseled cross on rock, marked "1652" | 1,651.09 |
| Glen Jean, 0.1 mile east of station, on south abutment of bridge of Chesapeake & Ohio Ry., east end; bronze tablet stamped "1605" | 1,603.665 |
| Harvey, 125 feet northwest of railroad telegraph office, 150 feet west of road crossing, on curve to north, in bluff north of railroad tracks; chiseled cross on rocks, marked "1571" | 1,569.69 |
| Harvey, 1 mile east of, on sharp curve to south, 7 feet north of track, 0.1 mile east of milepost T 4; chiseled cross on rock, marked "1486" | 1,485.39 |
| Harvey, 1.7 miles east of, 0.2 mile east of mouth of Hamilton Branch, 75 feet north of track, on north bank of Dunloup Creek, in sandstone ledge; bronze tablet stamped "1404" | 1,402.735 |
| Harvey, 3.2 miles east of, 0.7 mile east of Meadow Forks, 800 feet east of milepost T 2, 25 feet south of track, in curve to south; chiseled cross on rock, marked "1249" | 1,247.82 |
| Thomas, 0.25 mile east of, 700 feet east of milepost T 1, 10 feet south of track, on sharp curve to north; chiseled cross on rock, marked "1113" | 1,111.94 |
| Thurmond, in north end of east abutment of bridge over New River; aluminum tablet stamped "1068" | 1,067.457 |

**From point 6 miles east of Surveyor east along Chesapeake & Ohio Ry. to Raleigh (leveled twice).**

| | |
|---|---|
| Eccles, 3 miles east of, 450 feet west of signboard at Cabell, in south face of east abutment of railroad bridge 185 over Big Whitestick Creek; bronze tablet stamped "2345" | 2,343.208 |
| Westwood, 450 feet west of road crossing, 150 feet west of head block of switch, 20 feet south of track; chiseled cross on rock, marked "2332" | 2,329.75 |
| Mabscott station, 800 feet east of Beckley Junction, in north end of west abutment of bridge 162; chiseled cross, marked "2277" | 2,275.49 |
| Mabscott, 1 mile east of, in south end of west abutment of bridge 154, over Big Whitestick Creek; bronze tablet stamped "2266" | 2,264.792 |
| West Raleigh station and post office, 0.7 mile west of, in front of coal mine, in south end of west abutment of bridge 148; chiseled cross, marked "2205" | 2,204.26 |
| West Raleigh, in front of post office and C. & C. Co. store; top of rail | 2,122 |
| Raleigh, in front of station; top of rail | 2,123.2 |
| Raleigh, 0.3 mile east of station, at Glen Morgan, on west end of south abutment of bridge 132 over Beaver Creek; chiseled cross, marked "2103" | 2,101.72 |

**From Quinnimont west along Chesapeake & Ohio Ry. to Raleigh (leveled twice).**

| | |
|---|---|
| Quinnimont, 46 feet south of station, in top of north abutment at west side of railroad bridge; aluminum tablet stamped "1200" | 1,199.058 |
| Prince, in front of station; top of rail (1912) | 1,192.1 |
| Stanaford, 5 miles northeast of, 0.3 mile east of Terry Junction, on north end of east abutment of bridge 10; chiseled cross, marked "1190" | 1,188.35 |
| McCreery, in front of station; top of rail | 1,197.8 |
| Stanaford, 4 miles northeast of, about 300 feet north of mouth of Batoff Creek, 125 feet south of milepost P 2 in curve to east, on rock east of track; chiseled cross, marked "1206" | 1,204.56 |
| Stanaford, 3.1 miles northeast of, at Pack (Wright post office), 150 feet south of signboard, on west side of track; chiseled cross on rock, marked "1254" | 1,253.13 |
| Stanaford, 1.9 miles northeast of, 0.4 mile west of mouth of Fat Creek, in curve to south, 75 feet south of track, on south bank of Piney Creek, 500 feet west of milepost P 4, in large sandstone rock; bronze tablet stamped "1366" | 1,364.603 |

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| | Feet. |
|---|---|
| Stanaford, 0.8 mile northeast of, at Stonewall; cross on east end of north abutment of bridge 52 | 1,452.91 |
| Stanaford, 400 feet south of post office, 30 feet east of track, on bank of Piney Creek; chiseled cross on rock, marked "1524" | 1,523.18 |
| Raleigh, 6.5 miles northeast of, at north end of curve to left, 400 feet south of milepost P 7, on west side of track; chiseled cross on rock, marked "1611" | 1,609.67 |
| Raleigh, 5.6 miles northeast of, at Whitestick, on west end of north abutment of bridge over Cranberry Creek; bronze tablet stamped "1700" | 1,698.739 |
| Raleigh, 4.6 miles northeast of, at north end of curve to west, 200 feet north of milepost P 9, 6 feet west of track; chiseled cross on rock, marked "1821" | 1,819.51 |
| Raleigh, 3.7 miles northeast of, 700 feet north of signboard at Rodes, 300 feet south of signal house, 20 feet west of main track; chiseled cross on rock, marked "1889" | 1,888.25 |
| Raleigh, 2.3 miles northeast of, at Whorley, in south end of west abutment of bridge 112 over Piney Creek; bronze tablet stamped "1984" | 1,982.369 |
| Raleigh, 1.3 miles northeast of, on curve to east, on west end of north abutment of bridge 122 over small stream; chiseled cross, marked "2044" | 2,042.78 |

**Near Crow (part of a circuit from Raleigh lying mostly in Flat Top quadrangle and based upon line from Quinnimont).**

| | |
|---|---|
| Crow, 0.5 mile west of, 10 feet west of junction of track up Little Beaver Creek and grade extending past Crow, 5 feet south of track; chiseled cross on rock, marked "2400" | 2 399.81 |
| Crow, 0.6 mile south of, about 300 feet east of Little Beaver Creek, 100 feet north of railroad crossing, 5 feet east of road, on sandstone rock; bronze tablet stamped "2414" | 2,413.502 |

**Near Sewell.**

| | |
|---|---|
| Sewell, 1 mile east of, south edge of track; chisel point on bowlder, chiseled "1437 U. S." | 1,436.47 |
| Sewell, on bluff above, at road crossing of Sewell Valley Lumber Co.'s railroad and Springdale wagon raod; chisel point on bowlder, chiseled "1240 U. S." | 1,239.95 |
| Sewell, 0.6 mile south of, 170 feet south of milepost "Cin. 268," in foundation of semaphore pole; aluminum tablet stamped "1011" (description as published in Bull. 399, p. 11, is in error) | 1,010.113 |

## ECCLES QUADRANGLE.

[Latitude 37° 45′–38°; longitude 81° 15′–81° 30′.]

**From Lester north along Virginian Ry. to Surveyor, thence northwest along highway to point 4.2 miles northwest of Masseysville.**

| | |
|---|---|
| Lester, 120 feet west of railroad, about 400 feet southwest of station, north side of street, in store building; bronze tablet stamped "2030" | 2,029.713 |
| Lester, 1.1 miles north of, 8 feet west of railroad track, opposite curve; chiseled cross on rock, marked "1947" | 1,946.83 |
| Surveyor, 0.25 mile north of, at road crossing Virginian Ry.; top of rail | 1,924.94 |
| Surveyor, 850 feet northwest of road crossing, 15 feet east of road, 50 feet north of creek; chiseled cross on flat rock, marked "1909" | 1,909.08 |
| Surveyor, 1 mile northwest of, 200 feet northwest of road forks, on steep hill, east side of road; chiseled cross on large flat rock, marked "1952" | 1,952.21 |
| Surveyor, 2 miles northwest of, 800 feet east of John Taylor's store, 500 feet north of house, east side of road, in bowlder; bronze tablet stamped "1913" | 1,912.714 |
| Surveyor, 3.1 miles northwest of, south side of road; chiseled cross on ledge of rock, marked "1886" | 1,885.85 |

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[illegible] miles northwest of, [illegible] feet east of creek, [illegible] feet south of road, [illegible] chiseled cross on large rock boulder marked "[illegible]" ..... Feet. 1,786.79

[illegible] post office, east of ..... 1,734

[illegible] post office, 1 1/2 mile northwest of, [illegible] feet east of creek crossing, 15 feet east of road, in large sandstone rock, bronze tablet stamped "[illegible]" ..... 1,730.241

[illegible] 1 mile northwest of, 1 feet east of road, opposite old stone chiseled cross in flat rock, marked "[illegible]" ..... 1,714.91

[illegible] post office, in front of chiseled cross on large flat rock, marked "[illegible]" ..... 1,708.60

[illegible] 1 mile northwest of, west side of woods, 40 feet south of gate, chiseled cross in rock ledge, marked "[illegible]" ..... 1,682.23

[illegible] 2.5 miles northwest of, in front of Joseph A. Sturm's house, east side of road, in sandstone ledge, bronze tablet stamped "[illegible]" ..... 1,696.552

*Zaria* post office, 1.5 mile northwest of, on top of hill, west side of road; chiseled cross in rock, marked "[illegible]" ..... 1,815.13

*Zaria*, 1 mile northwest of, east side of road, chiseled cross on ledge of rock, marked "1779" ..... 1,568.02

*Zaria*, 1.9 miles northwest of, north side of road at sharp turn to north; chiseled cross in flat rock, marked "[illegible]" ..... 1,483.11

*Zaria*, 2.7 miles northwest of, west side of road, chiseled cross on large flat rock, marked "[illegible]" ..... 1,537.58

*Mannyville*, 40 feet northwest of post office, 40 feet east of Rock Creek, in face of sandstone ledge, bronze tablet stamped "1330" ..... 1,329.450

*Mannyville*, 0.4 mile northwest of, 0.3 mile east of Dry Creek post office, north side of road, where old road leads off to south; chiseled cross in rock ledge, marked "1353" ..... 1,353.99

*Mannyville*, 1.8 miles northwest of, 0.5 mile west of Dry Creek post office, west side of road; chiseled cross on top of large sharp rock, marked "1286" 1,286.61

*Mannyville*, 3 miles northwest of, 1.5 miles northwest of Dry Creek post office, west side of road; chiseled cross on top of sandstone bowlder, marked "1304" ..... 1,303.31

*Mannyville*, 4.2 miles northwest of, at mouth of Horse Creek, 60 feet east of bridge, 15 feet east of road forks, in ledge of rock; bronze tablet stamped "1103" ..... 1,103.013

**From Stover north along highways to point 1 mile north of Clear Creek, thence northwest along highways and Chesapeake & Ohio Ry. to point 1.4 miles west of Dorothy.**

*Matville*, 1.6 miles south of, on sandstone ledge at road junction; chiseled cross, marked "1788" ..... 1,787.51

*Matville*, 0.8 mile south of, 300 feet west of large hollow, 250 feet west of house, 10 feet north of road; chiseled cross on rock, marked "1793" ..... 1,792.58

*Matville*, 0.5 mile north of, between road and small stream, 5 feet west of road, on sandstone rock; chiseled cross, marked "1882" ..... 1,881.39

*Matville*, 0.8 mile north of, 125 feet south of divide between Clear Fork and Lick Creek, 50 feet east of road, in large sandstone rock; bronze tablet stamped "1997" ..... 1,996.919

*Matville*, 2 miles north of, at point where road crosses Clear Fork, about 200 feet south of sharp bend to west, 20 feet west of road, on south bank of creek; chiseled cross on rock, marked "1691" ..... 1,690.69

*Matville*, 3.1 miles north of, 600 feet north of junction of road leading to Ortsville, 8 feet east of road; chiseled cross on bowlder, marked "1636". 1,635.94

*Matville*, 4 miles north of, 0.3 mile south of mouth of Johns Fork, about 300 feet south of house, 10 feet east of road, in sandstone ledge; bronze tablet stamped "1610" ..... 1,608.940

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| | Feet. |
|---|---|
| Matville, 4.8 miles north of, 0.5 mile north of mouth of Johns Fork, about 200 feet west of road, in open field; chiseled cross on sandstone ledge, marked "1589" | 1,588.07 |
| Clear Creek, 0.4 mile south of, 0.2 mile north of mouth of Workman Creek, 400 feet north of church, between road and creek; chiseled cross on sandstone bowlder, marked "1504" | 1,503.70 |
| Clear Creek, 1 mile north of, at mouth of Toney Fork, road fork 50 feet north of, 8 feet west of road, in sandstone ledge; bronze tablet stamped "1461" | 1,460.627 |
| Clear Creek, 2.1 miles north of, 900 feet north of mouth of Horse Creek, 10 feet west of road; chiseled cross on rock, marked "1405" | 1,404.06 |
| Artie, 0.5 mile north of, 0.3 mile north of mouth of Whiteoak Creek, 100 feet northwest of road, 8 feet southeast of narrow-gage railroad; chiseled cross on bowlder, marked "1308" | 1,307.23 |
| Artie, 1.6 miles north of, 0.5 mile south of mouth of Fulton Creek, 100 feet east of sharp bend in creek to north, 30 feet south of road, on north creek bank, in sandstone bowlder; bronze tablet stamped "1242" | 1,241.379 |
| Colcord, 3.3 miles southeast of, 0.6 mile northwest of mouth of Fulton Creek, in curve to north, 10 feet north of narrow-gage railroad, 40 feet north of road; chiseled cross on sandstone rock, marked "1201" | 1,199.83 |
| Colcord, 2 miles southeast of, 0.7 mile southeast of mouth of Long Branch, in bend in road to north, about 60 feet southwest of house, 12 feet south of narrow-gage railroad, 3 feet south of road; chiseled square on sandstone rock, marked "1123" | 1,122.45 |
| Colcord, 1.2 miles southeast of, 0.1 mile southwest of mouth of Long Branch, 50 feet northeast of ford, on east bank of Clear Fork, 10 feet west of road, in large sandstone rock; bronze tablet stamped "1074" | 1,073.247 |
| Colcord, 0.2 mile southeast of, about 300 feet south of road, 5 feet north of railroad spur, in cut 30 feet from west end; chiseled cross on rock, marked "1036" | 1,035.29 |
| Lawson, 100 feet south of post office, 150 feet east of small hollow, 10 feet north of Chesapeake & Ohio Ry.; chiseled cross on rock, marked "1022" | 1,020.89 |
| Dorothy, 0.5 mile east of, about 600 feet northwest of Santa Mine tipple, 20 feet east of ford, on north bank of Clear Fork, in sandstone rock; bronze tablet stamped "960" | 959.210 |
| Dorothy, 0.6 mile west of, at east end of long curve to south, opposite east house of row facing track, 10 feet south of track; chiseled cross on rock, marked "939" | 938.56 |
| Dorothy, 1.4 miles west of, in north end of west abutment of railroad bridge 263, over Clear Creek; chiseled cross, marked "915" | 914.30 |

**From point near Clear Creek east along highway and Chesapeake & Ohio Ry. to Pax.**

| | |
|---|---|
| Clear Creek, 1 mile north of, at mouth of Toney Fork; bronze tablet stamped "1461" | 1,460.627 |
| Clear Creek, 2.2 miles east of, 700 feet east of mouth of Ewing Fork, 50 feet south of road, on south bank of Toney Fork; chiseled cross on rock, marked "1564" | 1,563.74 |
| Clear Creek, 3.1 miles east of, 150 feet east of hollow entering from south and opposite mouth of hollow entering from north, 300 feet east of house, 15 feet south of road; chiseled cross on rock, marked "1765" | 1,764.73 |
| Clear Creek, 4.1 miles east of, on divide between Toney Fork and Willis Branch, on boundary line between Raleigh and Fayette counties, 100 feet south of road, on sandstone rock; bronze tablet stamped "2447" | 2,446.538 |

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| | Feet. |
|---|---|
| Pax, 1.8 miles west of station, on road leading up Willis Branch, 50 feet south of road junction, 40 feet north of Willis Branch, about 200 feet east of small stream, 10 feet east of road; chiseled cross on rock, marked "1729" | 1,727.89 |
| Pax, 0.8 mile north of station, 10 feet west of track, at south end of cut; cross chiseled in rock, marked "1628" | 1,628.16 |
| Pax, 900 feet north of station, 60 feet west of track, in sandstone rock; bronze tablet stamped "1639" | 1,638.770 |
| Pax, 0.7 mile east of, 0.2 mile west of headblock of switch on main track, 30 feet south of main track, in mouth of small hollow; chiseled cross on rock, marked "1636" | 1,635.24 |

**From Surveyor east along Chesapeake & Ohio Ry. 6 miles (leveled twice).**

| | |
|---|---|
| Surveyor, 150 feet north of post office, Virginian Ry. track, in center of road crossing; west rail | 1,924.9 |
| Surveyor, 1.2 miles east of, 0.3 mile west of Baylor, 200 feet west of milepost P 24, in curve to south, 15 feet north of track; chiseled cross on rock, marked "1940" | 1,938.74 |
| Surveyor, 2.2 miles east of, 0.2 mile east of Glen White Junction, at west edge of hollow between two cuts, 10 feet north of track, at south side of road, 125 feet east of milepost P 23; chiseled cross on rock, marked "2014" | 2,012.68 |
| Eccles, 800 feet west of station, at west end of cut, 50 feet south of track; chiseled cross on rock, marked "2142" | 2,141.14 |
| Eccles, in front of station; top of rail | 2,167.7 |
| Eccles, 0.9 mile east of, 0.4 mile south of small tunnel, 600 feet west of log road tunnel through railroad embankment, in small hollow in clearing, 100 feet south of track; chiseled cross on rock, marked "2261" | 2,260.17 |
| Eccles, 2 miles east of, at west end of tunnel through divide between Marsh Fork and Big Whitestick Creek, 30 feet south of track; chiseled cross on rock, marked "2400" | 2,399.08 |

## FLATTOP QUADRANGLE.

[Latitude 37° 30′–37° 45′; longitude 81°–81° 15′.]

**From Camp Creek north along highway to point 6 miles south of Ghent.**

| | |
|---|---|
| Camp Creek, in top of east end of south concrete abutment to highway bridge over Camp Creek; bronze tablet stamped "1975" | 1,974.258 |
| Ghent, 6.1 miles south of, 500 feet southeast of house, east side of road, at sharp turn to west, in ledge of rock; bronze tablet stamped "2751" | 2,749.593 |

**From Raleigh east along highway to Crow, thence south to Ghent, thence west and north to Raleigh. (An excessive closure error was distributed in this line.)**

| | |
|---|---|
| Glen Morgan, 1.1 miles east of, 100 feet east of crossing of railroad tracks, south of lumber mill, 15 feet south of road crossing; chiseled cross on rock, marked "2148" | 2,147.15 |
| Beaver, 0.7 mile east of, 150 feet south of bridge over Little Beaver Creek, 10 feet north of track, 10 feet east of road crossing; cross on rock, marked "2231" | 2,229.75 |
| Beaver, 2.4 miles east of, 700 feet east of twin trestle, at mouth of large hollow entering from south, 30 feet south of Little Beaver Creek, on curve to south, 10 feet north of narrow gage track; chiseled cross on rock, marked "2340" | 2,339.36 |
| (See Beckley quadrangle portion of this line here omitted.) | |
| Crow, 2.1 miles south of, 300 feet north of small stream entering from east, 100 feet east of Little Beaver Creek, 3 feet east of lumber track, in curve to left; chiseled cross on rock, marked "2456" | 2,454.96 |

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| | Feet. |
|---|---|
| Crow, 3.3 miles south of, 200 feet south of trail entering at bridge, 50 feet east of Little Beaver Creek, 3 feet east of lumber track; chiseled cross on rock, marked "2503" | 2,502.84 |
| Crow, 4.3 miles south of, 0.4 mile south of large hollow entering from west, 0.1 mile north of sharp hollow entering from east, 200 feet east of Little Beaver Creek, on south side of clump of rock; chiseled cross on rock, marked "2650" | 2,649.18 |
| Shady Spring, 1 mile east of, 200 feet west of Little Beaver Creek, on south side of road, in sandstone rock; bronze tablet stamped "2710" | 2,709.141 |
| Shady Spring, 150 feet north of post office, 20 feet west of road, north of road junction, chiseled cross on rock, marked "2694" | 2,693.58 |
| Shady Spring, 1.5 miles south of, 100 feet north of road leading to west, 8 feet west of road; chiseled cross on rock, marked "2772" | 2,771.26 |
| Shady Spring, 2.6 miles south of, 250 feet south of small drain, 10 feet west of road; chiseled cross on rock, marked "2842" | 2,841.92 |
| Shady Spring, 4.3 miles south of, 30 feet north of small drain, on curve of road to east, 10 feet west of road, in sandstone bowlder; bronze tablet stamped "2922" | 2,922.14 |
| Shady Spring, 5.1 miles south of, 150 feet north of small stream, 10 feet east of road; chiseled cross on bowlder, marked "2874" | 2,875.14 |
| Shady Spring, 6.3 miles south of, 500 feet north of road leading to north, 5 feet west of road; chiseled cross on rock, marked "2913" | 2,912.78 |
| Ghent, 350 feet north of, 5 feet east of road; chiseled cross on rock, marked "2989" | 2,988.22 |
| Ghent, 1 mile west of, 70 feet west of road junction, 5 feet north of road; chiseled cross on rock, marked "3005" | 3,004.42 |
| Ghent, 1.8 miles west of, 0.25 mile west of divide between Laurel Creek and Glade Creek, 10 feet south of road, 100 feet east of small stream, in sandstone rock; bronze tablet stamped "2960" | 2,960.219 |
| Ghent, 2.8 miles west of, 100 feet north of bridge over Piney Creek, in road fork, 10 feet west of road; chiseled cross on rock, marked "2728" | 2,728.11 |
| Ghent, 4 miles west of, 800 feet east of large hollow draining to south, 100 feet east of small hollow, 6 feet south of road; chiseled cross on ledge of rock, (erroneously) marked "2693" | 2,792.80 |
| Odd, 0.2 mile north of, at road fork, in rock; bronze tablet stamped "2708" | 2,707.802 |
| Odd, 1.4 miles north of, at head of Sugar Cane Branch, on small rise between two hollows, 4 feet east of road; chiseled cross on rock, marked "2774" | 2,774.31 |
| Odd, 2.7 miles north of, 100 feet south of bend to west, on east side of road; chiseled cross on rock, marked "2550" | 2,549.41 |
| Odd, 3.7 miles north of, 500 feet north of house, 30 feet west of Piney Creek, 25 feet west of private road, in rock; bronze tablet stamped "2309" | 2,308.786 |
| Odd, 5.3 miles north of, on east side of road, in curve to east; chiseled cross on rock, marked "2304" | 2,303.89 |
| Abney, 0.8 mile south of, 0.25 mile north of road junction, 150 feet northwest of house, at foot of large stump; chiseled cross on rock, marked "2621" | 2,610.54 |
| Abney, 0.3 mile north of, on west edge of road, in large flat sandstone rock; bronze tablet stamped "2591" | 2,590.809 |
| Pemberton, 1.8 miles south of, on hillside sloping to north, on curve of road to east; chiseled cross on rock on west side of road, marked "2639" | 2,628.85 |
| Pemberton, 300 feet south of post office, 5 feet east of public road, in sandstone ledge; bronze tablet stamped "2284" | 2,283.655 |

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| | Feet. |
|---|---|
| Cedar station, 0.3 mile south of, in cut, 100 feet north of its end, 5 feet west of track, opposite mouth of Turkey Branch; chiseled cross on rock, marked "2254" | 2,254.42 |
| Cedar station, 0.7 mile north of, 350 feet north of mouth of Crab Orchard Creek, 7 feet west of Chesapeake & Ohio Ry. track; chiseled cross on rock | 2,225.30 |
| Fitzpatrick, 0.6 mile south of, west of deep cut, in upper face of east abutment, bridge over Piney River, south of track; bronze tablet stamped "2218" | 2,218.198 |
| Fitzpatrick, 0.5 mile north of, 500 feet east of culvert over Piney Creek, in curve to north, 7 feet north of track; chiseled cross on rock, marked "2172" | 2,171.95 |
| West Raleigh, in front of station; top of rail | 2,122.0 |

**From Ghent south 7.2 miles (spur line run twice; 0.43 foot divergence here).**

| | |
|---|---|
| Ghent, 1 mile west of, 70 feet west of road to south, 5 feet north of road; chiseled cross on rock, marked "3005" | 3,004.42 |
| Ghent, 2.5 miles southwest of, 70 feet west of road to south, 5 feet north of road; chiseled cross on rock, marked "3250" | 3,249.09 |
| Ghent, 3.5 miles south of, 100 feet south of roads fork, west side of road; chiseled cross on large flat rock, marked "3245" | 3,244.47 |
| Ghent, 4.7 miles south of, at sharp turn to west, on east side of road; chiseled cross on large black bowlder, marked "3063" | 3,062.40 |
| Ghent, 4.3 miles south of, 700 feet south of deserted house, east side of road, in large bowlder; bronze tablet stamped "3159" | 3,157.757 |
| Ghent, 5.25 miles south of, 4 feet east of road; chiseled cross on rock, marked "2887" | 2,885.80 |
| Ghent, 6.25 miles south of, 20 feet south of road leading to east, east side of road; chiseled cross on rock, marked "2761" | 2,760.60 |

## PINEVILLE QUADRANGLE.

[Latitude 37° 30′–37° 45′; longitude 81° 30′–81° 45′.]

**From Davy (Hallsville post office) north along public roads to Oceana.**

| | |
|---|---|
| Davy, 0.8 mile east of, 100 feet southeast of milepost 406; chiseled square on rock | 1,213.870 |
| Davy, 100 feet southwest of milepost 407, on south end of east bridge seat of railroad bridge 901; chiseled square | 1,180.03 |
| Davy, 2.7 miles north of, 2 feet west of road and about 250 feet south of top of gap; oval chiseled on rock | 1,783.66 |
| Davy, 2.7 miles north of, 4 feet east of road and about 3 feet below it, 250 feet south of gap in mountain, in rock; aluminum tablet stamped "1777" | 1,776.689 |
| Davy, 4.9 miles north of, about 200 feet west of schoolhouse and 20 feet southeast of old cabin, 3 feet east of road; cross on rock | 1,393.28 |
| Davy, 5.9 miles north of, 3 feet north of road, 500 feet west of old splash dam; cross on top of rock | 1,333.69 |
| Brier, 150 feet north of post office, east side of road; cross on rock | 1,251.15 |
| Brier, 150 feet north of post office, 10 feet east of road, about 4 feet above level of same, in ledge of rock; aluminum tablet stamped "1255" | 1,255.022 |
| Indian and Brier creeks, junction of; surface of water, May, 1910 | 1,205 |
| Indian and Brier creeks, 50 feet northeast of junction of, on south side of road, in root of red-oak tree; nail | 1,214.47 |
| Davy, 7.8 miles north of, 250 feet west of point where drain crosses road, 4 feet north of road; chiseled oval on rock | 1,225.90 |

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| | Feet. |
|---|---|
| Davy, 8.8 miles north of, about 800 feet northeast of Indian Creek crossing, 200 feet southwest of hilltop, north side of road; cross on rock | 1,193.19 |
| Baileysville, 0.3 mile north of, 6 feet west of road, at mouth of small drain, in ledge of rock; aluminum tablet stamped "1139" | 1,138.214 |
| Baileysville, 1 mile north of, south side of road, in top of gap; cross on rock | 1,442.18 |
| Baileysville, 2 miles north of, 40 feet north of schoolhouse, 50 feet south of road forks and creek crossing; cross on rock | 1,254.04 |
| Baileysville, 2.9 miles north of, 100 feet north of sharp turn in road where trail leaves road to left and goes up Clear Fork, 6 feet east of road, in ledge of rock; aluminum tablet stamped "1205" | 1,204.192 |
| Baileysville, 4.8 miles north of, in front of H. W. Sander's residence, 3 feet west of road, 4 feet north of gate to yard; cross on second stone step marked "1211.5" | 1,211.15 |
| Baileysville, 6.4 miles north of, about 12 feet below level of road, 30 feet west of road, 10 feet south of large white-oak tree, about 700 feet south of where road comes back on Clear Fork, in rock; aluminum tablet stamped "1221.5" | 1,221.211 |
| Baileysville, 7.1 miles north of, 150 feet north of where road crosses Clear Fork on east bank of creek, 150 feet southwest of house; cross on corner stone | 1,228.42 |
| Oceana, 400 feet east of post office, 50 feet south of Oceana high-school building, south side of southwest corner of office of school building, north side of street, about 3.5 feet above level of ground, in brick wall; aluminum tablet stamped "1259" | 1,258.718 |

**From Oceana east and south along roads to Pineville.**

| | |
|---|---|
| Oceana, 1.2 miles east of, at junction of Laurel and Clear Fork creeks, 20 feet south of store, in forks of road; cross on rock | 1,261.06 |
| Oceana, 3.5 miles east of, 6 feet west of road, between road and Laurel Fork, about 250 feet west of G. E. Walker's house; cross on rock | 1,328.89 |
| Oceana, 3.5 miles east of, 6 feet west of road and between same and Laurel Fork, about 250 feet west of G. E. Walker's house, in rock; aluminum tablet stamped "1331" | 1,330.666 |
| Oceana, 5.6 miles southeast of, 4 feet west of road, about 300 feet north of house on opposite side of Laurel Fork; nail in root of beech tree | 1,357.27 |
| Oceana, 5.6 miles southeast of, about 300 feet north of house, in bend of Laurel Fork, on opposite side of creek, about 12 feet above level of road, in rock; aluminum tablet stamped "1363" | 1,362.668 |
| Jesse, 15 feet north of post office, in southwest corner of road; nail in root of walnut tree (railroad bench mark) | 1,365.05 |
| Jesse, 2 miles southeast of, 100 feet south of where road crosses Elkins Fork, about 0.5 mile from top of Elkins Gap, southeast of road; nail in root of white-oak stump | 1,766.78 |
| Jesse, 3.6 miles southeast of, 6 feet south of forks to southwest, at foot of rail-box; cross on rock | 1,710.76 |
| Rockview, 100 feet northwest of post office, 8 feet west of road and about 5 feet above it, in rock; aluminum tablet stamped "1628" | 1,627.419 |
| Jesse, 6.8 miles southeast of, 15 feet northwest of ford over Rock Castle Creek, 25 feet southeast of old log building; cross on sharp-pointed rock | 1,377.92 |
| Pineville, 250 feet northeast of schoolhouse building, between two roads that fork at schoolhouse, in rock; aluminum tablet stamped "1323" | 1,323.227 |

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**From Baileysville northeast along public roads to point 2.5 miles south of Pineville.**

| | Feet. |
|---|---|
| Brier Creek, 1.3 miles southeast of, south side of road, about 500 feet east of prominent bend in road to left; nail in root of large sycamore tree | 1,216.53 |
| Brier Creek, 2.6 miles east of, south side of road and 6 feet east of drain; cross on rock | 1,223.86 |
| Brier Creek, 2.6 miles east of, 50 feet northeast of road, about same distance east of drain, in ledge of rock; aluminum tablet stamped "1236" | 1,235.580 |
| Brier Creek, 3.4 miles southeast of, south side of road and 30 feet west of where Dry Branch crosses road; cross on rock | 1,240.72 |
| Mulberry, 600 feet east of post office, 30 feet south of schoolhouse and 20 feet south of road, 10 feet north of branch; cross on rock | 1,275.99 |
| Mulberry, 600 feet east of post office, 60 feet north of road, about 50 feet northwest of schoolhouse, in ledge of rock; aluminum tablet stamped "1282" | 1,281.649 |
| Mulberry, 2 miles east of, south side of road, about 1 mile from top of gap, west side of gap; cross on ledge of rock | 1,548.14 |
| Mulberry, 3 miles east of, 140 feet east of gap, south side of road; cross on rock | 1,805.28 |
| Mulberry, 3 miles east of, 6 feet north of road, 160 feet east of gap, in vertical ledge of rock; aluminum tablet stamped "1807" | 1,806.824 |
| Mulberry, 4 miles east of, north side of road, 0.3 mile from foot of mountain; cross on large rock | 1,403.97 |
| Mulberry, 5 miles east of, 10 feet north of ford over Pinnacle Creek, about 7 feet above level of water; nail in root of sycamore tree | 1,315.05 |
| Pineville, about 1 mile south of, 250 feet northeast of junction of Guyandot River and Pinnacle Creek, 10 feet east of road forks, in ledge of rock; aluminum tablet stamped "1308" | 1,307.911 |
| Pineville, 2.5 miles east of, 8 feet north of road by persimmon tree, in clearing 500 feet east of woods; cross on rock | 1,223.31 |

**From McGraws west along roads to Jesse.**[1]

| | |
|---|---|
| McGraws, 1.5 miles west of, just at foot of mountain, 6 feet south of fork of second-class road to northeast, opposite blacksmith shop; cross on ledge of rock | 1,555.68 |
| McGraws, 2.6 miles west of, 250 yards northeast of Laurel Fork, 6 feet south of road and 18 feet west of creek; cross on rock | 1,420.17 |
| McGraws, 4 miles west of, 300 feet west of Allen Branch, 8 feet north of road, about 3 feet above level of road, in rock; bronze tablet stamped "1413" | 1,409.287 |

**From Beech Branch up Big Huff Creek to Trace Fork.**

| | |
|---|---|
| Cyclone, 6 miles east of, 600 feet below Lower Gap Branch, on east side of road up Big Huff Creek, 100 feet above D. H. Cook's store; iron post stamped "1068" | 1,069.100 |
| Road fork, 1 mile above; nail in root of tall sycamore tree 50 feet to right of road up Big Huff Creek | 1,221.05 |

**From its mouth up Toney Fork 2 miles (single spur line).**

| | |
|---|---|
| Cyclone, 7 miles east of, south side of Toney Fork of Huff Creek, about 2 miles above mouth, in ledge of rock; copper bolt stamped "U. S. G. S. 1234 Ft. B. M." | 1,235.989 |

[1] An excessive error has been distributed in this line.

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**From its mouth up Trace Branch of Elk Creek northeast over Divide and down Elk Trace to Big Huff Creek.**

| | Feet. |
|---|---|
| Christian, 7.5 miles northeast of, on south side of road, at ruins of old house; point on sandstone rock marked "U. S. B. M. 1574" | 1,573.88 |
| Lower Gap Branch, 600 feet below, on south side of road up Big Huff Creek; iron post stamped "1068" | 1,069.100 |

**MULLENS QUADRANGLE.**

[Latitude 37° 30′–37° 45′; longitude 81° 15′–81° 30′.]

**From point 2.5 miles south of Pineville east to Virginian Ry. at point 2.3 miles south of Mullens.**

| | |
|---|---|
| Pineville, 3.5 miles east of, south side of road, 600 feet west of Sugar Creek, just east of small drain; cross on large flat rock | 1,334.30 |
| Pineville, 5 miles east of, 15 feet southwest of bend in road where it rounds end of spur, about 0.25 mile south of schoolhouse, in rock; aluminum tablet stamped "1378" | 1,377.931 |
| Pineville, 5.3 miles east of, north side of road by gate, 100 feet southwest of house; cross on rock | 1,357.52 |
| Pineville, 8 miles east of, about 300 feet east of trail to south over river, 8 feet north of road, in rock; aluminum tablet stamped "1369" | 1,369.143 |
| Pineville, 10.2 miles east of, 2 feet south of road, about 200 feet southwest of Dogwood Spring; cross on rock | 1,388.07 |
| Pineville, 10.5 miles east of, 10 feet south of road, 50 feet south of large chestnut tree, 200 feet west of bridge; nail in root of maple tree (railroad bench mark) | 1,383.28 |
| Pineville, 11.4 miles east of, south end of east abutment to Virginian Ry. bridge over Barker Creek, about 450 feet west of main line of railroad, in top face; aluminum tablet stamped "1396" | 1,395.901 |

**From Mullens south along Virginian Ry. to Herndon.**

| | |
|---|---|
| Mullens, 3.5 miles south of, 12 feet south of Virginian Ry. track, in sharp curve to left; oval on large flat rock | 1,460.54 |
| Mullens, 4.8 miles south of, at Taft's siding, 3.5 feet west of Virginian Ry. track, on top face of northwest abutment to railroad over Barker Creek; cross in concrete | 1,517.65 |
| Bud, 400 yards southeast of post office, 12 feet southeast of Virginian Ry. in top face of southeast abutment to railroad bridge over Barker Creek, in concrete; aluminum tablet stamped "1593" | 1,593.548 |
| Bud, 3.1 miles south of, 6 feet north of Virginian Ry. track; cross on ledge of rock | 1,778.28 |
| Herndon, about 500 feet northwest of water tank, 10 feet south of Virginian Ry. track, in top face of southeast abutment of railroad bridge over creek, in rock; aluminum tablet stamped "1878" | 1,878.522 |

**From Mullens northeast along Virginian Ry. to Tams (Gulf post office).**

| | |
|---|---|
| Mullens, at bank building, top of north stone banister of steps of bank entrance, in rock; aluminum tablet stamped "1418" | 1,418.192 |
| Mullens, 3.1 miles east of, 5 feet south of railroad, about 2 feet below level of same, on lower face of southwest abutment to culvert, in concrete; aluminum tablet stamped "1474" | 1,473.984 |
| Mullens, 3.8 miles east of, 6 feet south of railroad, southeast corner of truss over Allen Fork; top of bolt through guard rail | 1,492.41 |
| Mullens, 7.2 miles east of, 8 feet west of railroad, about 300 feet north of old splash dam, in ledge of rock; aluminum tablet stamped "1561" | 1,560.686 |



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| | Feet. |
|---|---|
| Mullens, 10.8 miles northeast of, 15 feet west of Virginian Ry. track, about 0.25 mile north of Berry bridge, in rock on bank; aluminum tablet stamped "1648" | 1,647.855 |
| Tams (Gulf post office), 40 feet west of station platform, 200 feet north of truss over Bailey Branch, about 6 feet above track, in wall of rock; aluminum tablet stamped "1735" | 1,735.154 |

**From Mullens north along Virginian Ry. to Lester.**

| | |
|---|---|
| Mullens, 3.8 miles north of, about 200 feet north of tunnel, northeast abutment of bridge over Slab Fork, northwest corner of top step | 1,559.91 |
| Maben, 60 feet southeast of station, in end of concrete water conveyor from mill pond; bronze tablet stamped "1586" | 1,585.795 |
| Maben, 2.8 miles north of, southeast abutment to bridge over Old Slab Fork; southeast corner of third step down | 1,671.34 |
| Maben, 2.8 miles north of, 8 feet south of railroad, on second step down of southeast abutment of bridge over Old Slab Fork, in rock; bronze tablet stamped "1673" | 1,673.280 |
| Slab Fork, in front of station; top of rail | 1,904 |
| Slab Fork, 1 mile north of, about 250 yards south of switch, 6 feet east of railroad track; cross on ledge of rock, marked "1986" | 1,985.98 |
| Slab Fork, 1 mile north of, 8 feet east of railroad track, 300 yards south of drain in rock; bronze tablet stamped "1986" | 1,986.069 |
| Lester, 120 feet west of railroad, about 400 feet southwest of station, north side of street, in store building; bronze tablet stamped "2030" | 2,029.713 |

**From Maben northwest along Ritter's narrow-gage railroad to McGraws (an excessive error has been distributed in this line).**

| | |
|---|---|
| Maben, 4 miles northwest of, in top of gap, 6 feet west of narrow gauge railroad, in ledge of rock; bronze tablet stamped "2172" | 2,172.444 |
| Maben, 7.3 miles northwest of, 150 feet west of railroad crossing, 7 feet south of railroad, in ledge of rock; aluminum tablet stamped "1806" | 1,805.744 |
| Maben, 8.2 miles northwest of, about 200 feet southeast of road crossing, north end of small cut and 125 feet southeast of truss; cross on ledge of rock | 1,793.86 |
| McGraws, about 200 yards south of post office, 20 feet north of drain, 8 feet west of road; oval chiseled on ledge of rock | 1,750.67 |
| McGraws, 0.6 mile west of, just in Glen Gap, 6 feet south of road; cross on rock | 1,973.63 |

**From Pinnacle Creek east along Micajah Ridge to tunnel.**

| | |
|---|---|
| Herndon, 5.5 miles west of, 75 feet north of house of Cosby Lambert, 5 feet south of county road, in sandstone ledge; aluminum tablet stamped "22551909" | 2,254.180 |
| Herndon, 4.7 miles west of, north side of road, 50 feet east of road forks, 75 feet west of schoolhouse, nail in wooden plug set in top of stone post marked "U. S. B. M. 2373" | 2,372.63 |
| Herndon, 3.4 miles southwest of, 400 feet northwest of house in low gap, 200 feet south of road to west, west side of county road, on sandstone ledge; chiseled square | 2,351.70 |
| Herndon, 2.9 miles southwest of, west side of county road, 900 feet southwest of house of Mr. Steele, in sandstone ledge; aluminum tablet stamped "2392 1909" | 2,391.679 |
| Herndon, 1.7 miles west of, just north of county road, on sandstone rock; chiseled square | 2,445.45 |

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**Antietam, Berryville, Gerrardstown, and Martinsburg quadrangles.**

**BERKELEY, JEFFERSON, AND MORGAN COUNTIES.**

Elevations are based on bench marks of the Baltimore & Ohio precise-level line at Harpers Ferry, Kearneysville, and Martinsburg.

The leveling in Berryville and Martinsburg quadrangles was done by H. S. Senseney in 1914. The bench mark at Martinsburg Courthouse was set by E. I. Ireland. The leveling in Gerrardstown quadrangle and the north part of Martinsburg quadrangle was by K. W. Trimble in 1914, and in Antietam quadrangle in 1907 by W. R. Winstead.

For elevations in Antietam and Martinsburg quadrangles in Virginia and Maryland, see Bulletins 562 and 563.

**ANTIETAM QUADRANGLE.**

[Latitude 39° 15′–39° 30′; longitude 77° 30′–77° 45′.]

**At Harpers Ferry.**

| | Feet. |
|---|---|
| Harpers Ferry, on northwest corner of south end of west abutment of road bridge near toll office; point marked "U. S. B. M. 279" | 279.03 |
| Harpers Ferry, in front face of post office on south side of main entrance; aluminum tablet stamped "Adj 275" | 274.416 |

**BERRYVILLE QUADRANGLE.**

[Latitude 39°–39° 15′; longitude 77° 45′–78°.]

**From Summit Point east to Kabletown, thence northeast to Keys Ford, Shenandoah River.**

| | |
|---|---|
| Summit Point, northeast corner of railroad crossing, in base of sign post; spike, marked "U. S. B. M. 620" | 620.07 |
| Summit Point, 1.4 miles south of, west side of road, in telephone pole; spike, marked "U. S. B. M. 617" | 617.27 |
| Summit Point, 2.7 miles southeast of, south side of road, in ledge; bronze tablet stamped "620" | 620.158 |
| Summit Point, 3.8 miles southeast of, north side of road, in telephone pole; spike, marked "U. S. B. M. 548" | 548.37 |
| Rippon; top of west rail at road crossing, marked "U. S. 521" | 520.6 |
| Rippon, southeast corner of roads at post office, in telephone pole; spike, marked "U. S. B. M. 537" | 536.68 |
| Rippon, 2.2 miles east of, 100 feet north of forks of roads, east side of road, in ledge; bronze tablet stamped "509" | 508.791 |
| Kabletown, at forks of roads, at Kabletown schoolhouse, in telephone pole; spike, marked "U. S. B. M. 478" | 477.64 |
| Kabletown, 1.2 miles north of, east side of road, in culvert; bronze tablet stamped "433" | 432.811 |
| Kabletown, 2.3 miles north of, east side of north end of bridge over Evitt Run; painted bolt head, marked "U. S. B. M. 404" | 403.74 |
| Mechanicstown, opposite sign post "Kabletown," in telephone pole; spike, marked "U. S. B. M. 446" | 446.49 |
| Mechanicstown, 0.9 mile southeast of, in northeast corner of concrete arch over Evitt Run; bronze tablet stamped "352" | 352.07 |
| Mannings Ferry; water surface of Shenandoah River, July 31, 1914, 11.30 a. m. | 330.6 |

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| | Feet. |
|---|---|
| Mannings Ferry, 0.7 mile east of, south side of road, in root of tree; copper nail with washer, stamped "U. S. G. S. W. Va. B. M.", marked "U. S. B. M. 336" | 336.22 |
| Mannings Ferry, 1.8 miles east of, east side of road, in root of stump; copper nail with washer, stamped "U. S. G. S. W. Va. B. M.," marked "U. S. B. M. 413" | 413.16 |

### GERRARDSTOWN QUADRANGLE.

[Latitude 39° 15′–39° 30′; longitude 78°–78° 15′.]

**From Tablers southwest along Cumberland Valley R. R. to Bunker Hill, thence southeast along highway to Middleway.**

| | |
|---|---|
| Tablers, northwest corner of grade crossing, in telephone pole; spike, marked "U. S. B. M. 560" | 560.222 |
| Tablers, front of station; top of west rail | 560.8 |
| Tablers, 0.9 mile south of, 200 feet south of road crossing, east side of track, in ledge; bronze tablet stamped "562" | 561.638 |
| Darkesville, front of station; top of east rail | 562.0 |
| Darkesville, northwest corner of road crossing, in root of tree; copper nail with washer stamped "U. S. G. S. B. M. W. Va.," marked "U. S. B. M. 560" | 560.494 |
| Inwood, front of station; top of west rail | 575.7 |
| Inwood, northeast corner of base of signal post; painted bolthead, marked "U. S. B. M. 576" | 575.616 |
| Inwood, 0.3 mile east of, northwest corner of roads at toll gate, in ledge; bronze tablet stamped "569 Prim. Trav. Sta. No. 6, 1914" | 568.810 |
| Inwood, 1.5 miles south of, east side of track, on ledge; chiseled square, marked "U. S. B. M. 580" | 579.83 |
| Bunker Hill, 25 feet northeast of road crossing, in base of warning sign-post; spike, marked "U. S. B. M. 565" | 564.93 |
| Bunker Hill, 2 miles east of, south side of road, in cement culvert; bronze tablet stamped "538" | 538.519 |
| Bunker Hill, 2.8 miles east of, 60 feet west of Fairview Schoolhouse, in root of tree; copper nail with washer, stamped "U. S. G. S. W. Va. B. M.," marked "U. S. B. M. 568" | 567.791 |
| Bunker Hill, 4.3 miles east of, north end of east abutment of bridge over Opecquon Creek; chiseled square, marked "U. S. B. M. 443" | 443.322 |

**From Inwood northwest to Ganotown, thence northeast to Jones Spring.**

| | |
|---|---|
| Inwood, 0.3 mile east of, in northwest corner of cross roads, 45 feet northwest of toll gate, in limestone ledge; bronze tablet stamped "569" | 568.810 |
| Inwood, 1.1 mile west of, 180 feet west of road fork, 15 feet south of highway, on limestone ledge; chiseled square, marked "652 B. M." | 651.98 |
| Inwood, 1.8 miles west of, in southeast corner of cross roads, on limestone ledge; chiseled square, marked "631 B. M." | 631.19 |
| Gerrardstown, in concrete porch floor of D. S. Griffith's store, 3 feet east of main entrance; bronze tablet stamped "676" | 676.413 |
| Gerrardstown, 1.3 miles west of, 14 feet south of highway, in root of pine tree; nail marked "841 B. M." | 840.958 |
| Gerrardstown, 1.9 miles northwest of, summit of Little North Mountain, in southwest corner of crossroads, on sandstone ledge; chiseled square, marked "1083 B. M." | 1,082.75 |
| Ganotown, 2.1 miles east of, in northwest corner of road fork, in root of red-oak tree; nail, marked "648.6 B. M." | 648.60 |

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| | Feet. |
|---|---|
| Ganotown, 1.6 miles east of, 230 feet east of road fork, 8 feet north of highway, in sandstone ledge; bronze tablet stamped "610" | 610.380 |
| Ganotown, 0.2 mile east of, 17 feet north of highway; nail in base of cedar tree marked "513 B. M." | 512.70 |
| Ganotown, at road fork, on top of property corner stone; painted square marked "545 B. M." | 545.11 |
| Ganotown, 0.8 mile north of, northeast corner of foundation wall of United Brethren Church, in north face; bronze tablet stamped "577" | 577.168 |
| Shanghai, 1.3 miles south of, in southeast corner of road fork; nail in root of white-oak tree, marked "523 B. M." | 523.14 |
| Shanghai, northeast corner of crossroads, 4 feet north of southwest corner of store building, in top of concrete foundation; bronze tablet stamped "529" | 529.156 |
| Shanghai, 1.1 miles north of, in northeast corner of road fork; nail in root of large oak tree, marked "490 B. M." | 489.89 |
| Shanghai, 2.5 miles north of, south end of west abutment to highway bridge over small stream; chiseled square, marked "527 B. M." | 527.133 |
| Jones Spring, 0.4 mile south of, in top of east side of concrete porch floor of Jones Spring school; bronze tablet stamped "586" | 585.900 |
| Jones Spring, 0.7 mile north of, in southwest corner of road fork; chiseled square on sandstone ledge, marked "725 B. M." | 725.20 |

**From Shanghai west to Ungers Store, thence north to Oakland.**

| | |
|---|---|
| Shanghai, 1.4 miles west of, 8 feet north of highway; nail in base of telephone pole, marked "765 B. M." | 764.93 |
| Shanghai, 2.4 miles west of, 4 feet north of highway; chiseled square on sandstone ledge, marked "1112 B. M." | 1,112.44 |
| Shanghai, 3.5 miles west of, on summit, 4 feet south of highway, in sandstone ledge; bronze tablet stamped "1584" | 1,583.888 |
| Shanghai, 4.5 miles west of, 12 feet north of highway; nail in base of poplar tree, marked "1832 B. M." | 1,832.01 |
| Ungers Store, 4 miles east of, summit of Sleepy Creek Mountain, 4 feet south of highway; chiseled square on sandstone ledge, marked "1841 B. M." | 1,841.00 |
| Ungers Store, 2.8 miles east of, 20 feet south of highway, in large sandstone bowlder; bronze tablet stamped "1265" | 1,264.604 |
| Ungers Store, 1.4 miles east of, 130 feet east of school building, 30 feet west of road fork; nail in root of black-oak tree, marked "1054 B. M." | 1,054.07 |
| Ungers Store, 150 feet west of, 12 feet north of highway; nail in root of cherry tree, marked "B. M." | 905.22 |
| Ungers Store, 370 feet west of, in southwest corner of road fork; nail in root of large oak tree, marked "886 B. M." | 886.16 |
| Ungers Store, 0.7 mile west of, 200 feet east of crossroads, 20 feet north of highway, in sandstone ledge; bronze tablet stamped "850" | 849.551 |
| Oakland, 1.8 miles south of, 30 feet south of stream crossing, 8 feet west of highway; nail in base of oak tree, marked "781 B. M." | 780.618 |
| Oakland, 0.9 mile south of, at road fork, 13 feet west of highway; nail in base of telephone pole, marked "768 B. M." | 768.017 |
| Oakland, in center of concrete approach to S. E. Shockey's residence; bronze tablet stamped "764" | 763.694 |
| Oakland, 1.5 miles north of, in southwest corner of road fork; nail in base of mail-box post, marked "707 B. M." | 707.00 |

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## MARTINSBURG QUADRANGLE.

[Latitude 39° 15′–39° 30′; longitude 77° 45′–78°.]

**From Martinsburg northeast along Cumberland Valley R. R. to Berkeley, thence east and south to Shepherdstown.**

| | Feet. |
|---|---|
| Martinsburg, at King Street entrance of Berkeley County courthouse, eastern end of first step up from sidewalk; tablet stamped "457.7" | 456.692 |
| Martinsburg, about 0.2 mile west of station, about 280 feet east of milepost "Baltimore 100 miles," in middle of north coping of an arch; copper bolt (Baltimore & Ohio R. R. bench mark 75) | 432.913 |
| Martinsburg, 1.5 miles northeast of, 10 feet east of Cumberland Valley R. R., on limestone ledge; chiseled square, marked "487 B. M." | 487.019 |
| Martinsburg, 2.5 miles northeast of, 225 feet north of milepost 91, 27 feet east of Cumberland Valley R. R., on limestone ledge; chiseled square, marked "487.4 B. M." | 487.463 |
| Berkeley, opposite station; top of rail | 477.265 |
| Berkeley, 1,500 feet north of station, overhead bridge, in front face of east abutment; aluminum tablet stamped "471" | 471.130 |
| Berkeley, 0.3 mile northeast of, 45 feet north of over-grade bridge, 10 feet west of Cumberland Valley R. R., in limestone ledge; bronze tablet stamped "Prim. Trav. Sta. No. 1 470 1914" | 470.096 |
| Berkeley, 1.9 miles southeast of, 300 feet southeast of dwelling, 15 feet south of highway, on limestone ledge; chiseled square, marked "394.5 B. M." | 394.568 |
| Berkeley, 3.1 miles southeast of, 25 feet south of road fork, on limestone ledge; chiseled square, marked "472 B. M." | 472.058 |
| Berkeley, 4.4 miles east of, 150 feet east of Herman Lam residence, at right-angle turn in highway, 15 feet east of highway, in limestone ledge; bronze tablet stamped "468" | 468.498 |
| Scrabble, 1.6 miles west of, 25 feet west of road fork, 50 feet east of road fork, 20 feet north of highway, on limestone ledge; chiseled square, marked "434 B. M." | 434.103 |
| Scrabble, 0.5 mile west of, 50 feet west of road fork, 7 feet north of highway, on limestone ledge; chiseled square, marked "394.8 B. M." | 394.925 |
| Scrabble, 50 feet east of highway bridge over Rocky Marsh Run, 14 feet south of highway; bronze tablet stamped "Prim. Trav. Sta. No. 2, 367, 1914" | 366.834 |
| Scrabble, 1.2 miles southeast of, 12 feet south of highway, in limestone ledge; chiseled square, marked "407.9 B.M." | 407.996 |
| Shepherdstown, 3.4 miles north of, 30 feet north of road fork, in top of stone retaining wall; chiseled square, marked "422.4 B. M." | 422.572 |
| Shepherdstown, 2.1 miles north of, 70 feet north of road fork, 12 feet west of highway, in limestone ledge; bronze tablet stamped "462" | 461.824 |
| Shepherdstown, 1.1 miles north of, 125 feet west of dwelling, 10 feet south of highway, in limestone ledge; chiseled square, marked "424.4 B. M." | 424.556 |
| Shepherdstown, northwest corner of German and Duke streets, in center of top of manhole guard stone; chiseled square | 443.422 |
| Shepherdstown, in front face of post office, 3 feet east of main entrance; aluminum tablet stamped "Adj. 406" | 405.451 |

**From Shepherdstown southwest via Kearneysville to point 3.4 miles south of Middleway.**

| | |
|---|---|
| Shepherdstown, 1 mile southwest of, 60 feet west of northwest corner of fair grounds, 12 feet south of highway, in limestone ledge; chiseled square, marked "467.2 B. M." | 467.348 |
| Shepherdstown, 1.9 miles southwest of, 35 feet south of Drake monument, on limestone outcrop; chiseled square, marked "545.8 B. M." | 545.982 |

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| | Feet. |
|---|---|
| Shepherdstown, 2.7 miles southwest of, 14 feet south of highway, 500 feet southwest of road fork, in limestone outcrop; bronze tablet stamped "515" | 515.224 |
| Kearneysville, 1.7 miles northeast of, in southeast corner of crossroads; chiseled square on limestone ledge, marked "517.0 B. M." | 517.217 |
| Kearneysville, 0.6 mile northeast of, at road fork, 18 feet south of highway, on limestone ledge; chiseled square, marked "515.6 B. M." | 515.806 |
| Kearneysville, about 200 feet west of railroad crossing, south side of road, in ledge; bronze tablet stamped "P. Trav. Sta. No. 8, 1914, 548" | 548.164 |
| Kearneysville, about 0.3 mile south of, about 75 feet east of milepost Balto. 92, in rock on north side of tracks; copper bolt (B. & O. b. m. No. 67) | 564.415 |
| Leetown, 2.4 miles north of, east side of road, in root of tree; copper nail with washer, stamped "U. S. G. S. W. Va. B. M.", marked "U. S. B. M. 523". | 522.94 |
| Leetown, 1 mile north of, in triangle made by forks of roads, on ledge; chiseled square, marked "U. S. B. M. 495" | 494.60 |
| Leetown, north side of doorway of M. E. Church South, in cement walk; bronze tablet stamped "503" | 502.910 |
| Middleway, 1.8 miles northeast of, east side of road, at summit of hill, in telephone pole; spike marked "U. S. B. M. 587" | 587.41 |
| Middleway, 1.1 miles north of, east side of road, in telephone pole; spike marked "U. S. B. M. 508" | 508.20 |
| Middleway, northeast corner of vacant building owned by Mrs. W. H. Gilbert; bronze tablet stamped "500" | 500.014 |
| Middleway, 1.2 miles south of, west side of road, on ledge; chiseled square, marked "U. S. B. M. 540" | 540.518 |
| Middleway, 2.1 miles south of, east side of road, in stump; copper nail with washer, stamped "U. S. G. S. W. Va. B. M.", marked "U. S. B. M. 562" | 562.24 |
| Middleway, 3.4 miles south of, 150 feet south of forks of roads, east side of road, in ledge; bronze tablet stamped "585" | 584.634 |

**From Shepherdstown southeast to point 1.8 miles west of Harpers Ferry.**

| | |
|---|---|
| Shepherdstown, 1 mile south of, in south vertex of triangle at road junction, in top of property corner stone; chiseled square, marked "462.4 B. M." | 462.62 |
| Shepherdstown, 2.1 miles southeast of, at crossroads, 7 feet north of concrete monument "4," on limestone ledge; chiseled square, marked "472.5 B. M." | 472.66 |
| Shepherdstown, 3.1 miles southeast of, 100 feet west of Lucas Creek, 14 feet north of highway, in limestone ledge; bronze tablet stamped "372" | 371.865 |
| Shepherdstown, 4 miles southeast of, 10 feet north of highway, on limestone ledge; chiseled square, marked "439 B. M." | 439.21 |
| Harpers Ferry, 5 miles north of, about 400 feet west of Potomac River, 12 feet east of highway, in limestone ledge; bronze tablet stamped "318" | 317.980 |
| Harpers Ferry, 4.8 miles north of, 400 feet north of dwelling, 8 feet west of highway, on limestone ledge; chiseled square, marked "379.7 B. M." | 379.945 |
| Harpers Ferry, 3.9 miles north of, 5 feet east of highway, on limestone ledge; chiseled square, marked "381.9 B. M." | 382.18 |
| Harpers Ferry, 3.3 miles north of, 50 feet south of road fork, 16 feet east of road, in limestone ledge; bronze tablet stamped "431" | 431.141 |
| Harpers Ferry, 2.2 miles northwest of, 12 feet west of highway, on limestone ledge; chiseled square, marked "400.6 B. M." | 400.90 |
| Harpers Ferry, 1.8 miles west of, northeast corner of Baltimore & Ohio concrete overgrade bridge; painted square, marked "324.2" | 324.502 |

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**From Keys Ford northeast to Harpers Ferry.**

| | Feet. |
|---|---|
| Keys Ford; water surface of Shenandoah River, Aug. 1, 1914, 9.20 a. m. | 298. 0 |
| Keys Ferry; water surface of Shenandoah River, Aug. 1, 1914, 9.45 a. m. | 295. 2 |
| Keys Ferry, 50 feet west of landing, east side of road, in ledge; bronze tablet stamped "301" | 301. 214 |
| Harpers Ferry Lime Co.'s ferry; water surface of Shenandoah River, Aug. 1, 1914, 11 a. m. | 294. 5 |
| Millville, in front of station; top of south rail | 334. 3 |
| Millville, opposite station, north side of road, in root of tree; copper nail with washer stamped "U. S. G. S. W. Va. B. M.," marked "U. S. B. M. 338" | 338. 286 |
| Millville, 1 mile northeast of, 50 feet north of milepost "H. F. 3 S. J. 48," west side of track, in rail rest; copper nail with washer, stamped "U. S. G. S. W. Va. B. M.,", marked "U. S. B. M. 310" | 309. 76 |
| Millville, 2 miles northeast of, 100 feet north of milepost "H. F. 2 S. J. 49," west side of track, in ledge; bronze tablet stamped "298" | 297. 713 |
| Millville, 3.1 miles northeast of, west side of north end of trestle; painted bolthead, marked "U. S. B. M. 283" | 283. 26 |

**From Martinsburg southwest along Cumberland Valley R. R. 3.7 miles (part of circuit; see continuation in Gerardstown quadrangle).**

| | |
|---|---|
| Martinsburg, about 0.2 mile west of station, about 280 feet east of milepost "Balto. 100," in middle of north coping of an arch; copper bolt (B. & O. b. m. No. 75) | 432. 913 |
| Martinsburg, 60 feet north of Cumberland Valley R. R. depot, 10 feet west of tracks, in root of tree; copper nail with washer, stamped "U. S. G. S. W. Va. B. M.," marked "U. S. B. M. 466" | 466. 419 |
| Martinsburg, in front of Cumberland Valley R. R. depot; top of east rail | 467. 4 |
| Martinsburg, 1 mile southwest of, east side of track, in telephone pole; spike marked "U. S. B. M. 498" | 497. 79 |
| Martinsburg, 2.2 miles southwest of, about 600 feet north of milepost 96, east side of track, in ledge; bronze tablet stamped "532" | 531. 591 |
| Martinsburg, 3.7 miles southwest of, 15 feet south of private road crossing, east side of track, on ledge; chiseled square, marked "U. S. B. M. 535" | 535. 00 |

## Williamsport quadrangle.

### BERKELEY COUNTY.

The elevations in the following list are based upon the 1912 adjustment of precise leveling.

The leveling was done by J. M. Harris in 1908 and by C. H. Semper in 1910.

### WILLIAMSPORT QUADRANGLE.

[Latitude 39° 30′–39° 45′; longitude 77° 45′–78°.]

**From Potomac River southwest along Cumberland Valley R. R. to Martinsburg.**

| | Feet. |
|---|---|
| Williamsport, 1.5 miles southwest of, near west end of railroad bridge No. 82–1; top of rail | 380. 5 |
| Potomac River, surface of water under bridge No. 82–1, August 5, 1908 | 325 |
| Williamsport, 2.3 miles southwest of, southwest corner of west bridge seat of railroad bridge No. 82–2, in top of; aluminum tablet stamped "363" | 362. 310 |
| Williamsport, 3.4 miles southwest of, top of west foundation of water tank; north end, marked "G. S. □ B. M. 361" | 361. 14 |

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| | Feet. |
|---|---|
| Falling Waters, 500 feet east of; northeast corner of east bridge seat of railroad bridge No. 85, marked "G. S. □ B M. 359" | 358.80 |
| Falling Waters, in front of station; top of rail | 372.0 |
| Falling Waters, 0.6 mile southwest of, in top of center of south head wall of concrete box culvert under railroad at telephone pole 85/31; aluminum tablet stamped "404" | 403.973 |
| Bedington, 1,020 feet east of station, north side of track, in railroad concrete culvert; aluminum tablet stamped "387" | 387.094 |
| Bedington, in front of station; top of rail | 392.3 |
| Bedington, 270 feet west of station, south side of track, in top of railroad culvert; copper bolt (Pennsylvania R. R. bench mark) | 391.806 |
| Bedington, 0.3 mile south of, east side of north abutment of railroad bridge over creek; top of mud wall, marked "U. S. □ B. M. 396" | 395.73 |
| Berkeley, 1,500 feet north of station, overhead bridge, in front face of east abutment; aluminum tablet stamped "471" | 471.13 |
| Berkeley, in front of station; top of rail | 477.4 |

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# APPENDIX A.

## PRECISE LEVELING BY THE UNITED AND GEODETIC SURVEY AND THE BA RAILROAD.

**Antietam, Blacksville, Cameron, Clarington, Elizabeth, Flintstone, Hancock, Harrisville, Keyser, Kingwood, Martinsburg, Parkersburg, Pawpaw, Thornton, West Williamsport quadrangles.**

**BERKELEY, DODDRIDGE, HAMPSHIRE, HARRISON, JEFFE MINERAL, MONONGALIA, MORGAN, PRESTON, RITCHIE, TA COUNTIES.**

The following descriptions and elevations are the Coast and Geodetic Survey and are here repr of the Superintendent of that bureau. The bu lished by the Coast and Geodetic Survey and by Railroad Co., and were included in the 1907 adj and Geodetic Survey. The elevations were no adjustment and are not likely to be changed by

For convenient reference, as results in Bulle 1903 adjustment, the elevations of bench ma to 1903 are given by both the 1903 and 1907

### ANTIETAM QUADRANGLE.

[Latitude 39° 15′–39° 30′; longitude 77° 30′–77°

**Bench marks established at Harpers Fer**

Harpers Ferry, on north side of tracks, almost directly Ferry signal tower, in capstone of north wing of west copper bolt (B. & O. bench mark 56A).....
(1903 adjusted value=285.628.)

Harpers Ferry, about 0.5 mile west of, 180 feet west of 82 miles," in native rock on south side of tracks, bench mark 57).....
(1903 adjusted value=291.014.)

### MARTINSBURG QUADRANGLE

[Latitude 39° 15′–39° 30′; longitude 77° 45′–

**From Harpers Ferry northwest along Baltimore & Ohio**

Engle, 1.8 miles east of, about 70 feet east of milepost in native rock on north side of tracks, about 8 fe bolt (B. & O. bench mark 58).....
(1903 adjusted value=310.139.)

Engle, about 0.7 mile east of, on south side of tracks, bridge 45; copper bolt (B. & O. bench mark 59)...
(1903 adjusted value=354.946.)



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U.S. Geological Survey

Bulletin 632

| DATE DUE | BORROWER'S NAME |
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# APPENDIX A.

## PRECISE LEVELING BY THE UNITED STATES COAST AND GEODETIC SURVEY AND THE BALTIMORE & OHIO RAILROAD.

**Antietam, Blacksville, Cameron, Clarington, Elizabeth, Elk Garden, Fairmont, Flintstone, Hancock, Harrisville, Keyser, Kingwood, Littleton, Mannington, Martinsburg, Parkersburg, Pawpaw, Thornton, West Union, Wheeling, and Williamsport quadrangles.**

**BERKELEY, DODDRIDGE, HAMPSHIRE, HARRISON, JEFFERSON, MARION, MARSHALL, MINERAL, MONONGALIA, MORGAN, PRESTON, RITCHIE, TAYLOR, WETZEL, AND WOOD COUNTIES.**

The following descriptions and elevations are taken from reports of the Coast and Geodetic Survey and are here republished by permission of the Superintendent of that bureau. The bench marks were established by the Coast and Geodetic Survey and by the Baltimore & Ohio Railroad Co., and were included in the 1907 adjustment by the Coast and Geodetic Survey. The elevations were not changed by the 1912 adjustment and are not likely to be changed by any future adjustment.

For convenient reference, as results in Bulletin 399 are based on the 1903 adjustment, the elevations of bench marks established previous to 1903 are given by both the 1903 and 1907 adjustments.

### ANTIETAM QUADRANGLE.

[Latitude 39° 15′–39° 30′; longitude 77° 30′–77° 45′.]

**Bench marks established at Harpers Ferry.**

| | Feet. |
|---|---|
| Harpers Ferry, on north side of tracks, almost directly across from Harpers Ferry signal tower, in capstone of north wing of west abutment of bridge; copper bolt (B. & O. bench mark 56A) (1903 adjusted value=285.628.) | 285.432 |
| Harpers Ferry, about 0.5 mile west of, 180 feet west of milepost "Baltimore 82 miles," in native rock on south side of tracks; copper bolt (B. & O. bench mark 57) (1903 adjusted value=291.014.) | 290.818 |

### MARTINSBURG QUADRANGLE.

[Latitude 39° 15′–39° 30′; longitude 77° 45′–78°.]

**From Harpers Ferry northwest along Baltimore & Ohio R. R. to Martinsburg.**

| | |
|---|---|
| Engle, 1.8 miles east of, about 70 feet east of milepost "Baltimore 83 miles," in native rock on north side of tracks, about 8 feet from tracks; copper bolt (B. & O. bench mark 58) (1903 adjusted value=310.139.) | 309.940 |
| Engle, about 0.7 mile east of, on south side of tracks, in middle of coping of bridge 45; copper bolt (B. & O. bench mark 59) (1903 adjusted value=354.946.) | 354.745 |



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| | Feet. |
|---|---|
| Engle, about 0.2 mile west of, about 30 feet west of milepost "Baltimore 85 miles," in native rock on south side of tracks; copper bolt (B. & O. bench mark 60) | 386.541 |
| (1903 adjusted value=386.744.) | |
| Engle, about 1.2 miles west of, about 600 feet east of milepost "Baltimore 86 miles," in native rock on north side of tracks; copper bolt (B. & O. bench mark 61) | 411.226 |
| (1903 adjusted value=411.433.) | |
| Duffields, about 1 mile east of, in south end of east wall of culvert 45 G; copper bolt (B. & O. bench mark 62) | 440.895 |
| (1903 adjusted value=441.103.) | |
| Duffields, about 50 feet east of milepost "Baltimore 88 miles," in west end of north coping of culvert 45 L; copper bolt (B. & O. bench mark 63) | 484.271 |
| (1903 adjusted value=484.479.) | |
| Shenandoah Junction, about 0.3 mile west of, about 400 feet west of milepost "Baltimore 89 miles," in native rock on south side of tracks; copper bolt (B. & O. bench mark 64) | 530.635 |
| (1903 adjusted value=530.848.) | |
| Shenandoah Junction, about 1.5 miles west of, about 500 feet west of milepost "Baltimore 90 miles," opposite telegraph pole 90–4 in a ledge of rock on north side of tracks; copper bolt (B. & O. bench mark 65) | 560.324 |
| (1903 adjusted value=560.539.) | |
| Hobbs, near, about 200 feet west of milepost "Baltimore 91 miles," in north end of west abutment of bridge 45; copper bolt (B. & O. bench mark 66) | 583.929 |
| (1903 adjusted value=584.145.) | |
| Kearneysville, about 0.3 mile south of, about 75 feet east of milepost "Baltimore 92 miles," in rock on north side of tracks; copper bolt (B. & O. bench mark 67) | 564.415 |
| (1903 adjusted value=564.635.) | |
| Kearneysville, about 1.2 miles north of, opposite milepost "Baltimore 93 miles," section of rail set vertically in ground (B. & O. bench mark 68) | 528.359 |
| (1903 adjusted value=528.580.) | |
| Van Clevesville, about 1.2 miles southeast of, opposite milepost "Baltimore 94 miles," section of rail set vertically in ground (B. &. O. bench mark 69) | 497.545 |
| (1903 adjusted value=497.767.) | |
| Van Clevesville, about 0.2 mile south of, almost directly behind milepost "Baltimore 95 miles," in a large rock on north side of tracks; copper bolt (B. & O. bench mark 70) | 478.086 |
| (1903 adjusted value=478.311.) | |
| Van Clevesville, about 0.8 mile northwest of, 250 feet west of milepost "Baltimore 96 miles," in rock on south side of tracks; copper bolt (B. & O. bench mark 71) | 450.599 |
| (1903 adjusted value=450.827.) | |
| Van Clevesville, about 1.8 miles northwest of, about 500 feet west of milepost "Baltimore 97 miles," in west end of south coping of a culvert; copper bolt (B. & O. bench mark 72) | 403.933 |
| (1903 adjusted value=404.164.) | |
| Opequon, near, about 600 feet east of milepost "Baltimore 98 miles," on north side of tracks, on west end of coping of culvert at telegraph pole 97/34; copper bolt (B. & O. bench mark 73) | 384.061 |
| (1903 adjusted value=384.291.) | |
| Martinsburg, 0.7 mile east of, 240 feet west of milepost "Baltimore 99 miles," in middle of north coping of bridge 49.2; copper bolt (B. & O. bench mark 74) | 399.333 |
| (1903 adjusted value=399.568.) | |

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| | Feet. |
|---|---|
| Martinsburg, about 0.2 mile west of station, about 280 feet east of milepost "Baltimore 100 miles," in middle of north coping of an arch; copper bolt (B. & O. bench mark 75) (1903 adjusted value=433.147.) | 432.911 |
| Martinsburg, about 1.5 miles northwest of, opposite milepost "Baltimore 101 miles," section of rail set vertically in ground (B. & O. bench mark 76) (1903 adjusted value=469.899.) | 469.661 |

**WILLIAMSPORT QUADRANGLE.**

[Latitude 39° 30′–39° 45′; longitude 77° 45′–78°.]

**From Martinsburg north along Baltimore & Ohio R. R. to Back Creek.**

| | |
|---|---|
| Martinsburg, about 2.5 miles northwest of, about 800 feet west of milepost "Baltimore 102 miles," in native rock on north side of tracks; copper bolt (B. & O. bench mark 77) (1903 adjusted value=490.500.) | 490.258 |
| Tabb, near, about 40 feet east of milepost "Baltimore 103 miles," in native rock; copper bolt (B. & O. bench mark 78) (1903 adjusted value=527.323.) | 527.079 |
| Tabb, near, about 200 feet west of milepost "Baltimore 104 miles," in a large rock on north side of tracks; copper bolt (B. & O. bench mark 79) (1903 adjusted value=522.883.) | 522.637 |
| Tabb, about 1.2 miles northwest of, opposite milepost "Baltimore 105 miles;" section of rail set vertically in ground (B. & O. bench mark 80) (1903 adjusted value=518.349.) | 518.103 |
| North Mountain, about 1.2 miles southeast of, about 500 feet west of milepost "Baltimore 106 miles," between tracks in the bridge seat of the east abutment of bridge 52; copper bolt (B. & O. bench mark 81) (1903 adjusted value=507.188.) | 506.938 |
| North Mountain, about 0.2 mile south of station, 850 feet west of milepost "Baltimore 107 miles," between tracks in bridge seat of east abutment of bridge 52½; copper bolt (B. & O. bench mark 82) (1903 adjusted value=528.149.) | 527.896 |
| North Mountain, about 0.5 mile north of, opposite milepost "Baltimore 108 miles;" section of rail set vertically in ground (B. & O. bench mark 83) (1903 adjusted value=528.726.) | 528.471 |
| North Mountain, about 1.5 miles northwest of, about 100 feet east of milepost "Baltimore 109 miles;" section of rail set vertically in ground (B. & O. bench mark 84) (1903 adjusted value=504.374.) | 504.116 |
| Back Creek, near, opposite milepost "Baltimore 110 miles;" section of rail set vertically in ground (B. & O. bench mark 85) (1903 adjusted value=462.700.) | 461.840 |

**HANCOCK QUADRANGLE.**

[Latitude 39° 30′–39° 45′; longitude 78°–78° 15′.]

**From Back Creek northwest along Baltimore & Ohio R. R. to Sir Johns Run.**

| | |
|---|---|
| Back Creek, west of, in north end of the west abutment of bridge 53; copper bolt (B. & O. bench mark 86) (1903 adjusted value=426.662.) | 426.400 |
| Cherry Run, about 1.5 miles southeast of, opposite milepost "Baltimore 112 miles;" section of rail set vertically in ground between tracks (B. & O. bench mark 87) (1903 adjusted value=391.900.) | 391.636 |

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| | Feet. |
|---|---|
| Cherry Run, about 0.6 mile east of, in south end of bridge seat of west abutment of bridge 54; copper bolt (B. & O. bench mark 88)..... (1903 adjusted value=385.101.) | 384.835 |
| Cherry Run, about 0.5 mile west of, opposite milepost "Baltimore 114 miles;" section of rail set vertically in ground (B. & O. bench mark 89). (1903 adjusted value=396.865.) | 396.597 |
| Miller, near, opposite milepost "Baltimore 115 miles;" section of rail set vertically in ground (B. & O. bench mark 90)..... (1903 adjusted value=404.608.) | 404.336 |
| Miller, near, opposite milepost "Baltimore 116 miles;" section of rail set vertically in ground (B. & O. bench mark 91)..... (1903 adjusted value=396.575.) | 396.302 |
| Sleepy Creek, about 0.4 mile east of, opposite milepost "Baltimore 117 miles;" section of rail set vertically in ground (B. & O. bench mark 92). (1903 adjusted value=399.461.) | 399.186 |
| Sleepy Creek, between tracks in bridge seat of east abutment of bridge 55; copper bolt (B. & O. bench mark 92A)..... (1903 adjusted value=395.836.) | 395.560 |
| Sleepy Creek, 0.5 mile west of, opposite milepost "Baltimore 118 miles;" section of rail set vertically in ground (B. & O. bench mark 93)..... (1903 adjusted value=401.527.) | 401.249 |
| Sleepy Creek, about 1.5 miles west of, opposite milepost "Baltimore 119 miles;" section of rail set vertically in ground (B. & O. bench mark 94). (1903 adjusted value=406.061.) | 405.783 |
| Sleepy Creek, about 2.5 miles west of, opposite milepost "Baltimore 120 miles;" section of rail set vertically in ground (B. & O. bench mark 95). (1903 adjusted value=407.229.) | 406.948 |
| Hancock, about 2 miles east of, opposite milepost "Baltimore 121 miles;" section of rail set vertically in ground (B. & O. bench mark 96)..... (1903 adjusted value=405.341.) | 405.058 |
| Hancock, about 1 mile east of, opposite milepost "Baltimore 122 miles;" section of rail set vertically in ground (B. & O. bench mark 97)..... (1903 adjusted value=409.366.) | 409.081 |
| Hancock, west end of north coping of bridge 56; copper bolt (B. & O. bench mark 97 A)..... (1903 adjusted value=417.675.) | 417.388 |
| Hancock, about 0.2 mile west of, opposite milepost "Baltimore 123 miles;" section of rail set vertically in ground (B. & O. bench mark 98)..... (1903 adjusted value=419.034.) | 418.746 |
| Hancock, about 1.2 miles southwest of, opposite milepost "Baltimore 124 miles;" copper bolt set vertically in ground (B. & O. bench mark 99)... (1903 adjusted value=417.507.) | 417.217 |
| Round Top, about 1 mile northeast of, opposite milepost "Baltimore 125 miles;" section of rail set vertically in ground (B. & O. bench mark 100). (1903 adjusted value=415.896.) | 415.603 |
| Round Top, opposite milepost "Baltimore 126 miles;" section of rail set vertically in ground (B. & O. bench mark 101)..... (1903 adjusted value=426.927.) | 426.630 |
| Round Top, about 1 mile southeast of, 150 feet east of milepost "Baltimore 127 miles;" in a rock outcrop on the north side of the tracks; copper bolt (B. & O. bench mark 102)..... (1903 adjusted value=426.670.) | 426.371 |
| Sir Johns Run, about 0.5 mile north of, opposite milepost "Baltimore 128 miles;" section of rail set vertically in ground (B. & O. bench mark 103). (1903 adjusted value=425.247.) | 424.943 |

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Sir Johns Run, about 0.5 mile south of, 20 feet west of telegraph pole 128/38, in native rock on south side of tracks; copper bolt (B. & O. bench mark 104) ..... Feet. 426.699
(1903 adjusted value=427.006.)

Sir Johns Run, about 0.5 mile south of, about 400 feet west of milepost "Baltimore 130 miles;" set in culvert coping on south side of tracks; copper bolt (B. & O. bench mark 105) ..... 426.600
(1903 adjusted value=426.909.)

## PAWPAW QUADRANGLE.

[Latitude 39° 30′–39° 45′; longitude 78° 15′–78° 30′.]

**From Great Cacapon west along Baltimore & Ohio R. R. to Little Cacapon.**

Great Cacapon, 1 mile east of, about 200 feet east of milepost "Baltimore 131 miles," in large rock on north side of track; copper bolt (B. & O. bench mark 106) ..... 436.334
(1903 adjusted value=436.648.)

Great Cacapon, near, between tracks in bridge seat of east abutment of bridge 57 across Great Cacapon river; copper bolt (B. & O. bench mark 107) ..... 435.613
(1903 adjusted value=435.929.)

Great Cacapon, about 1 mile west of, opposite milepost "Baltimore 133 miles;" section of rail set vertically in ground (B. & O. bench mark 108). 452.978
(1903 adjusted value=453.298.)

Woodmont, 0.3 mile west of, opposite milepost "Baltimore 134 miles;" section of rail set vertically in ground (B. & O. bench mark 109) ..... 450.435
(1903 adjusted value=450.759.)

Lineburg, about 0.8 mile east of, opposite telegraph pole 135/4; copper bolt in rock, on south side of tracks (B. & O. bench mark 110) ..... 454.169
(1903 adjusted value=454.495.)

Lineburg, about 0.2 mile west of, opposite milepost "Baltimore 136 miles;" section of rail set vertically in ground (B. & O. bench mark 111) ..... 458.214
(1903 adjusted value=458.541.)

Lineburg, about 1.2 miles south of, 25 feet east of milepost "Baltimore 137 miles," in a rock on south side of tracks; copper bolt (B. & O. bench mark 112) ..... 468.729
(1903 adjusted value=469.061.)

Orleans Road, about 0.8 mile east of, opposite milepost "Baltimore 138 miles;" section of rail set vertically in ground (B. & O. bench mark 113). 487.850
(1903 adjusted value=488.186.)

Orleans Road, about 0.3 mile south of, opposite milepost "Baltimore 139 miles;" section of rail set vertically in ground (B. & O. bench mark 114). 504.277
(1903 adjusted value=504.613.)

Rockwells Run, near, 500 feet beyond milepost "Baltimore 140 miles;" in rock on south side of tracks; copper bolt (B. & O. bench mark 115)... 523.004
(1903 adjusted value=523.343.)

Doe Gully, opposite milepost "Baltimore 141 miles;" section of rail set vertically in ground (B. & O. bench mark 116) ..... 546.652
(1903 adjusted value=546.995.)

Doe Gully, about 1 mile south of, opposite milepost "Baltimore 142 miles;" section of rail set vertically in ground (B. & O. bench mark 117) ..... 544.057
(1903 adjusted value=544.404.)

Hansrotte, 1 mile northeast of, directly opposite milepost "Baltimore 143 miles;" in rock on south side of tracks; copper bolt (B. & O. bench mark 118) ..... 520.465
(1903 adjusted value=520.815.)

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| | Feet. |
|---|---|
| Hansrotte, near, opposite milepost "Baltimore 144 miles;" section of rail set vertically in ground (B. & O. bench mark 119)..... (1903 adjusted value=494.572.) | 494.218 |
| Hansrotte, about 1 mile west of, opposite milepost "Baltimore 145 miles;" section of rail set vertically in ground (B. & O. bench mark 120)..... (1903 adjusted value=498.242.) | 497.886 |
| Baird, near, opposite milepost "Baltimore 146 miles;" section of rail set vertically in ground (B. & O. bench mark 121)..... (1903 adjusted value=498.003.) | 497.643 |
| Baird, about 1 mile southwest of, opposite milepost "Baltimore 147 miles;" section of rail set vertically in ground (B. & O. bench mark 122)..... (1903 adjusted value=490.256.) | 489.894 |
| Magnolia, about 1 mile northwest of, opposite milepost "Baltimore 148 miles;" section of rail set vertically in ground (B. & O. bench mark 123). (1903 adjusted value=494.440.) | 494.074 |
| Magnolia, about 0.2 mile east of, 500 feet beyond milepost "Baltimore 149 miles;" on south side of tracks in east end of coping of bridge 47 D; copper bolt (B. & O. bench mark 124)..... (1903 adjusted value=498.004.) | 497.630 |
| Magnolia, about 1 mile southeast of, opposite milepost "Baltimore 150 miles;" section of rail set vertically in ground (B. & O. bench mark 125). (1903 adjusted value=502.447.) | 502.076 |
| Magnolia, about 2 miles south of, opposite milepost "Baltimore 151 miles;" copper bolt in rock (B. & O. bench mark 126)..... (1903 adjusted value=511.896.) | 511.521 |
| Pawpaw, about 1 mile north of, opposite milepost "Baltimore 152 miles," in a rock on south side of tracks; copper bolt (B. & O. bench mark 127).. (1903 adjusted value=516.603.) | 516.226 |
| Pawpaw, about 0.8 mile north of, opposite milepost "Baltimore 153 miles;" section of rail set vertically in ground (B. & O. bench mark 128)..... (1903 adjusted value=527.034.) | 526.652 |
| Pawpaw, about 0.2 mile south of, opposite milepost "Baltimore 154 miles;" section of rail set vertically in ground (B. & O. bench mark 129)..... (1903 adjusted value=534.454.) | 534.067 |
| Pawpaw, 1.5 miles south of, opposite milepost "Baltimore 155 miles;" section of rail set vertically in ground (B. & O. bench mark 130)..... (1903 adjusted value=532.459.) | 532.072 |
| Little Cacapon, about 1 mile east of, about 500 feet east of milepost "Baltimore 156 miles," on south side of tracks in middle stone of coping of culvert; copper bolt (B. & O. bench mark 131)..... (1903 adjusted value=529.243.) | 528.851 |

## FLINTSTONE QUADRANGLE.

[Latitude 39° 30′–39° 45′; longitude 78° 30′–78° 45′.]

**From Little Cacapon west along Baltimore & Ohio R. R. to Patterson Creek.**

| | |
|---|---|
| Little Cacapon, near, about 600 feet east of milepost "Baltimore 157 miles," between tracks in bridge seat of west abutment of bridge 59; copper bolt (B. & O. bench mark 132)..... (1903 adjusted value=528.449.) | 528.057 |
| Okonoko, about 0.8 mile east of, opposite milepost "Baltimore 158 miles;" section of rail set vertically in ground (B. & O. bench mark 133)..... (1903 adjusted value=534.876.) | 534.477 |

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| | Feet. |
|---|---|
| Okonoko, about 0.2 mile west of, about 800 feet east of milepost "Baltimore 159 miles;" copper bolt in north end of west abutment of bridge 60 (B. & O. bench mark 134)..... (1903 adjusted value=538.769.) | 538.368 |
| Okonoko, about 1.2 miles southwest of, opposite milepost "Baltimore 160 miles;" section of rail set vertically in ground (B. & O. bench mark 135). (1903 adjusted value=537.486.) | 537.082 |
| French, about 0.4 mile east of, opposite milepost "Baltimore 161 miles;" section of rail set vertically in ground (B. & O. bench mark 136)..... (1903 adjusted value=541.194.) | 540.786 |
| French, about 0.8 mile west of, between tracks; copper bolt in a bridge seat of the east abutment of bridge 61 A (B. & O. bench mark 137)..... (1903 adjusted value=554.416.) | 554.005 |
| French, about 1.8 miles west of, near west end of a cut near where milepost "Baltimore 163 miles" would be if planted, in rock on south side of tracks; copper bolt (B. & O. bench mark 138)..... (1903 adjusted value=556.634.) | 556.219 |
| Green Spring, near, at milepost "Baltimore 164 miles," on south side of tracks in center of coping of culvert 62; copper bolt (B. & O. bench mark 139)..... (1903 adjusted value=552.351.) | 551.935 |
| Green Spring, about 1 mile west of, opposite milepost "Baltimore 165 miles;" section of rail set vertically in ground (B. & O. bench mark 140) (1903 adjusted value=559.656.) | 559.238 |
| Green Spring, about 2 miles west of, opposite milepost "Baltimore 166 miles;" section of rail set vertically in ground (B. & O. bench mark 141). (1903 adjusted value=562.497.) | 562.076 |
| Green Spring, about 3 miles west of, opposite milepost "Baltimore 167 miles;" section of rail set vertically in ground (B. & O. bench mark 142). (1903 adjusted value=560.101.) | 559.677 |
| Dans Run, opposite milepost "Baltimore 168 miles;" section of rail set vertically in ground (B. & O. bench mark 143)..... (1903 adjusted value=565.281.) | 564.851 |
| Dans Run, about 1 mile west of, opposite milepost "Baltimore 169 miles;" section of rail set vertically in ground (B. & O. bench mark 144)..... (1903 adjusted value=566.310.) | 565.878 |
| Patterson Creek Cut-Off, about 0.5 mile east of bridge, opposite milepost "Baltimore 170 miles;" section of rail set vertically in ground (B. & O. bench mark 145)..... (1903 adjusted value=568.009.) | 567.574 |
| Patterson Creek Cut-Off, south end of west abutment of railroad bridge over Patterson Creek (U. S. G. S. bench mark, 574 Patterson Creek)..... (1903 adjusted value=574.242.) | 573.805 |
| Patterson Creek Cut-Off, between tracks, in a bridge seat of the east abutment of bridge 63; copper bolt (B. & O. bench mark 145 A)..... (1903 adjusted value=569.372.) | 568.936 |
| Patterson Creek, about 0.3 mile northwest of, opposite milepost "Baltimore 171 miles;" section of rail set vertically in ground (B. & O. bench mark 146)..... (1903 adjusted value=575.601.) | 575.163 |

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### KEYSER QUADRANGLE.

[Latitude 39° 15′–39° 30′; longitude 78° 45′–79°.]

**Along Baltimore & Ohio R. R. near Keyser.**

| | Feet. |
|---|---|
| Keyser, near, opposite telegraph pole 201/8 set between tracks in south abutment of bridge; copper bolt (B. & O. bench mark 22) | 800.700 |
| Keyser, near center of Keyser yards, opposite milepost 202; section of rail set vertically in ground (B. & O. bench mark 23) | 827.000 |
| Keyser, at northwest end of Keyser yards, opposite milepost 203; section of rail set vertically in ground (B. & O. bench mark 24) | 837.597 |
| Keyser, near, opposite milepost 204; section of rail set vertically between tracks (B. & O. bench mark 25) | 854.578 |

### ELK GARDEN QUADRANGLE.

[Latitude 39° 15′–39° 30′; longitude 79°–79° 15′.]

**Along Baltimore & Ohio R. R. near Piedmont.**

| | |
|---|---|
| Piedmont, near, in bridge seat of abutment at telegraph pole 204/30; copper bolt (B. & O. bench mark 26) | 871.281 |
| Piedmont, near, at telegraph pole 205/21, in abutment of bridge; copper bolt (B. & O. bench mark 26 A) | 889.273 |
| Piedmont, 0.5 mile southeast of, opposite milepost 206; section of rail set vertically between tracks (B. & O. bench mark 27) | 906.084 |
| Piedmont, 0.5 mile southwest of, opposite milepost 207; section of rail set vertically in ground between tracks (B. & O. bench mark 28) | 932.915 |
| West Virginia Central Junction, 400 feet west of, in southwest end of bridge seat northwest abutment of bridge for siding over Potomac River; copper bolt (B. & O. bench mark 28 A) | 948.302 |

### KINGWOOD QUADRANGLE.

[Latitude 39° 15′–39° 30′; longitude 79° 30′–79° 45′.]

**From Corinth west along Baltimore & Ohio R. R. to Rowlesburg.**

| | |
|---|---|
| Corinth, 0.2 mile northwest of, in bridge at telegraph pole 238/20, copper bolt (B. & O. bench mark 59 A) | 2,434.838 |
| Rinard, near, opposite milepost 239; section of rail set vertically in ground between tracks (B. & O. bench mark 60) | 2,452.554 |
| Riggs, 0.5 mile east of, 250 feet west of milepost 240, on arch culvert; copper bolt (B. & O. bench mark 61) | 2,481.524 |
| Terra Alta, 1 mile southeast of, opposite milepost 241; section of rail set vertically in ground between tracks (B. & O. bench mark 62) | 2,524.106 |
| Terra Alta, 500 feet east of station, opposite milepost 242; section of rail set vertically in ground between tracks (B. & O. bench mark 63) | 2,545.238 |
| Terra Alta, 0.8 mile northwest of, in small bridge, at telegraph pole 242/35; copper bolt (B. & O. bench mark 64) | 2,512.748 |
| Terra Alta, 1.5 miles west of, in foundation of south side of east portal of tunnel; copper bolt (B. & O. bench mark 65) | 2,395.471 |
| Terra Alta, 3 miles southwest of, opposite milepost 245; section of rail set vertically in ground between tracks (B. & O. bench mark 66) | 2,263.207 |
| Terra Alta, 4 miles southwest of, opposite milepost 246; section of rail set vertically in ground between tracks (B. & O. bench mark 67) | 2,146.948 |
| Rodamers, 1 mile southwest of, telegraph pole 246/26, south side of west portal of Rodamers tunnel, in foundation; copper bolt (B. & O. bench mark 68) | 2,091.206 |



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| | Feet. |
|---|---|
| Amblersburg, 2.5 miles northeast of, opposite milepost 248; section of rail set vertically in ground between tracks (B. & O. bench mark 69) | 1,928.323 |
| Amblersburg, 1.5 miles northeast of, opposite milepost 249; section of rail set vertically in ground between tracks (B. & O. bench mark 70) | 1,811.555 |
| Amblersburg, 0.5 mile northeast of, opposite milepost 250; section of rail set vertically in ground between tracks (B. & O. bench mark 71) | 1,697.546 |
| Amblersburg, telegraph pole 250/27, in bridge; copper bolt (B. & O. bench mark 72) | 1,623.625 |
| Amblersburg, about 1 mile southwest of, west of tracks, at telegraph pole 251/30, 15 feet from north end of retaining wall; copper bolt (B. & O. bench mark 73) | 1,516.342 |
| Rowlesburg, 1.8 miles northeast of, in bridge 91 at telegraph pole 252/17½; copper bolt (B. & O. bench mark 74) | 1.473.166 |
| Rowlesburg, 1.2 miles northeast of, opposite milepost 253; section of rail set vertically in ground between tracks (B. & O. bench mark 74 A) | 1,450.371 |
| Rowlesburg, near, north of tracks, in mud wall of east abutment of Cheat River bridge; copper bolt (B. & O. bench mark 75) | 1,400.857 |
| Rowlesburg, 1 mile west of, 40 feet east of telegraph pole 255/14; copper bolt set in rock (B. & O. bench mark 76) | 1,490.643 |
| Rowlesburg, 1.5 miles west of, telegraph pole 255/25, in center of capstone, north end of long retaining wall east of tracks; copper bolt (B. & O. bench mark 76 A) | 1,528.744 |
| Rowlesburg, 2 miles northwest of, copper bolt set in east wing wall of north abutment of viaduct at telegraph pole 256/5 (B. & O. bench mark 77) | 1,581.092 |

**From point near Rowlesburg along Baltimore & Ohio R. R. to point 3.2 miles west of Rowlesburg.**

| | |
|---|---|
| Rowlesburg, 4 miles east of, on coping stone of abutment, at northwest corner of Baltimore & Ohio R. R. bridge over Salt Lick Creek; chiseled square (C. & G. S. bench mark L) (1903 adjusted value=1,624.164.) | 1,623.665 |
| Rowlesburg, at base of center pillar at west end of Baltimore & Ohio R. R. bridge over Cheat River; chiseled square, marked "B.M." (C. & G. S. bench mark XXVIII) (1903 adjusted value=1,400.839.) | 1,400.332 |
| Rowlesburg, 3.2 miles west of, on top of "Buckhorn Wall," about 131 feet from its eastern end; chiseled square, marked "B.M." (C. & G. S. bench mark XXIX) (1903 adjusted value=1,717.467.) | 1,716.955 |

## FAIRMONT QUADRANGLE.

[Latitude 39° 15′–39° 30′; longitude 80°–80° 15′.]

**From Grafton west along Baltimore & Ohio R. R. to Bridgeport.**

| | |
|---|---|
| Grafton, on top of north side of central pier of Baltimore & Ohio R. R. bridge over Taggarts Valley Creek, a branch of the Monongahela River; chiseled square (C. & G. S. bench mark M) (1903 adjusted value=996.856.) | 996.304 |
| Grafton, about 5.5 miles west of, on corner stone of east end of trestle 2½; chiseled square, marked "B.M." (C. & G. S. bench mark XXXI) (1903 adjusted value=1,082.623.) | 1,082.088 |
| Bridgeport, on corner stone of west abutment of Baltimore & Ohio R. R. bridge; chiseled square, marked "B.M." (C. & G. S. bench mark XXXII) (1903 adjusted value=979.626.) | 979.135 |

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**From Grafton northwest along Baltimore & Ohio R. R. to Fairmont.**

| | Feet. |
|---|---|
| Grafton, on Parkersburg branch, in north end of bridge seat of east abutment of bridge over Tygart River; copper bolt (B. & O. bench mark 102). | 995.050 |
| Grafton, 1 mile west of, near milepost 281; section of rail set vertically in ground between tracks (B. & O. bench mark 103) | 991.793 |
| Fetterman, in bridge 102; copper bolt (B. & O. bench mark 103 A) | 982.619 |
| Fetterman, 0.5 mile north of, in northwest end of northeast wing wall, northwest abutment of bridge 103; copper bolt (B. & O. bench mark 104). | 988.797 |
| Fetterman, 1.2 miles northwest of, at milepost 283; section of rail set vertically in ground between tracks (B. & O. bench mark 105) | 989.900 |
| Fetterman, 1.8 miles northwest of, on culvert at telegraph pole 283/20; copper bolt (B. & O. bench mark 105 A) | 982.196 |
| Fetterman, 2.5 miles north of, on culvert at telegraph pole 284/11; copper bolt (B. & O. bench mark 106) | 980.644 |
| Bush, about 3 miles southeast of Valley Falls, bridge seat at northeast corner of girder bridge 104, 7 feet east of center of track, 4 feet below top of outer rail of curve; bronze tablet stamped "986 Pittsburg 1899" (B. & O. bench mark 107; U. S. G. S. bench mark) | 985.048 |
| Bush, near, on bridge at telegraph pole 285/28; copper bolt (B. & O. bench mark 107 A) | 979.827 |
| Bush, 0.5 mile northwest of, on culvert at telegraph pole 286/10; copper bolt (B. & O. bench mark 108) | 981.901 |
| Valley Falls, about 1 mile east of, at milepost 287; section of rail set vertically in ground between tracks (B. & O. bench mark 109) | 982.911 |
| Valley Falls, 50 feet west of milepost 288 in native rock north of track; copper bolt (B. & O. bench mark 110) | 974.152 |
| Valley Falls, 1 mile northwest of, near milepost 289 in northwest end of southwest coping of arch bridge 105; copper bolt (B. & O. bench mark 111) | 944.936 |
| Hammond, 0.2 mile northwest of, on arch bridge 107; copper bolt (B. & O. bench mark 112) | 937.852 |
| Hammond, 1 mile west of, at telegraph pole 290/20; rail section set northwest of tracks (B. & O. bench mark 113) | 914.434 |
| Powells, 0.5 mile northwest of, on bridge 108, at telegraph pole 291/28; copper bolt (B. & O. bench mark 114) | 898.423 |
| Powells, 1.5 miles northwest of, 35 feet west of telegraph pole 292/14, in native rock; copper bolt (B. & O. bench mark 115) | 898.886 |
| Colfax, 1.2 miles southeast of, on arch culvert at telegraph pole 293/11; copper bolt (B. & O. bench mark 116) | 889.444 |
| Colfax, in center of north capstone of west coping of bridge 109; copper bolt (B. & O. bench mark 117) | 888.515 |
| Colfax, 1 mile northwest of, near southwest end of northwest coping of arch culvert at telegraph pole 295/17, copper bolt (B. & O. bench mark 118) | 885.389 |
| Bentons Ferry, 1 mile east of, in arch culvert at telegraph pole 296/20; copper bolt (B. & O. bench mark 119) | 887.131 |
| Bentons Ferry, at telegraph pole 297/22, in north end of east wing wall of north abutment of bridge 111; copper bolt (B. & O. bench mark 120) | 888.355 |
| Bentons Ferry, 160 feet west of signboard, bridge seat at southeast corner of small girder bridge 111, 4.5 feet below top of rail, 18.5 feet south of center of track; bronze tablet stamped "885 Pittsburg 1899" (U. S. G. S. bench mark) | 884.546 |
| Kingmont, north of tracks at telegraph pole 298/20; rail section (B. & O. bench mark 121) | 888.302 |

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| | Feet. |
|---|---|
| Kingmont, 1 mile northeast of, on large arch culvert at telegraph pole 299/21; copper bolt (B. & O. bench mark 122) | 881.560 |
| Kingmont, 1.5 miles northeast of, on arch culvert at telegraph pole 299/37; copper bolt (B. & O. bench mark 122 A) | 881.334 |
| Gaston Junction, in west end of bridge seat, north abutment of bridge 112 over Monongahela River; copper bolt (B. & O. bench mark 123) | 885.248 |
| Fairmont, between tracks, in southwest end of pier for overhead highway bridge; copper bolt (B. & O. bench mark 124) | 886.622 |
| Fairmont, 1 mile west of, in northwest end of bridge seat, southwest abutment of Fairmont, Morgantown & Pittsburg Bridge over Monongahela River; copper bolt (B. & O. bench mark 125) | 884.231 |
| Fairmont, near, in south end of bridge seat of east abutment of bridge to Fairmont roundhouse; copper bolt (B. & O. bench mark 125 A) | 868.666 |

## THORNTON QUADRANGLE.

[Latitude 39° 15′–39° 30′; longitude 79° 45′–80°.]

### Bench mark near Grafton.

| | |
|---|---|
| Grafton, about 2 miles east of, on corner stone of abutment of small bridge; chiseled square (B. & O. and C. & G. S. bench mark XXX) (1903 adjusted value=1,024.024.) | 1,023.476 |

### From Austen west along Baltimore & Ohio R. R. to Grafton.

| | |
|---|---|
| Rowlesburg, 3 miles west of, at telegraph pole 257/9; copper bolt set in rock (B. & O. bench mark 78) | 1,695.876 |
| Buckhorn, 0.2 mile northwest of, 40 feet southeast of telegraph pole 257/20, in northwest end of retaining wall, northeast of tracks; copper bolt (B. & O. bench mark 78 A) | 1,724.880 |
| Buckhorn, 1 mile northwest of, 40 feet northwest of telegraph pole 258/7; copper bolt set in rock (B. & O. bench mark 79) | 1,799.779 |
| Anderson, about 0.2 mile west of, at milepost "Baltimore 259;" section of rail set vertically in ground between tracks (B. & O. bench mark 80) | 1,857.240 |
| Tunnelton, 0.8 mile southeast of, at milepost "Baltimore 260"; section of rail set vertically in ground between tracks (B. & O. bench mark 81) | 1,828.379 |
| Tunnelton, about 0.2 mile west of, in first step of retaining wall north of tracks, at east portal of Kingwood tunnel; copper bolt (B. & O. bench mark 82) | 1,826.433 |
| Tunnelton, about 1 mile west of, at west end of Kingwood tunnel; section of rail set vertically in ground between tracks (B. & O. bench mark 83) | 1,783.651 |
| West End, 300 feet west of, in abutment of bridge; copper bolt (B. & O. bench mark 83 A) | 1,742.710 |
| Austen, about 1 mile east of, 40 feet south of tracks, near telegraph pole 263/12; copper bolt set in rock (B. & O. bench mark 84) | 1,627.887 |
| Austen, 0.2 mile east of, 50 feet west of Murray tunnel; copper bolt set in rock (B. & O. bench mark 85) | 1,552.694 |
| Austen, 0.8 mile west of, at milepost 265; section of rail set vertically in ground between tracks (B. & O. bench mark 86) | 1,443.864 |
| Newburg, near, at milepost 266; section of rail set vertically in ground between tracks (B. & O. bench mark 87) | 1,338.505 |
| Newburg, near, in seat of bridge 95; copper bolt (B. & O. bench mark 88) | 1,244.992 |
| Independence, 1 mile southwest of, at milepost 269; section of rail set vertically in ground between tracks (B. & O. bench mark 90) | 1,147.327 |
| Hardman, near, in seat of bridge 97; copper bolt (B. & O. bench mark 91) | 1,108.151 |

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| | Feet. |
|---|---|
| Ironton, 1 mile northeast of, nearly opposite milepost 271, in large rock about 100 feet southeast of tracks; copper bolt (B. & O. bench mark 92). | 1,101.464 |
| Ironton, near, at telegraph pole 271/37; copper bolt in rock 50 feet southeast of tracks (B. & O. bench mark 93) | 1,074.794 |
| Ironton, 0.8 mile southwest of, in abutment of pipe culvert at telegraph pole 272/26; copper bolt (B. & O. bench mark 94) | 1,064.447 |
| Thornton, 1 mile northeast of, at telegraph pole 273/25; section of rail set vertically in ground between tracks (B. & O. railroad bench mark 95) | 1,051.731 |
| Thornton, in abutment of bridge 99; copper bolt (B. & O. bench mark 96). | 1,040.165 |
| Thornton, 0.8 mile southwest of, opposite telegraph pole 275/15; section of rail set vertically in ground between tracks (B. & O. bench mark 97) | 1,039.660 |
| Thornton, 1.6 miles west of, in southwest end of bridge seat of southeast abutment of bridge at telegraph pole 276/8; copper bolt (B. & O. bench mark 98) | 1,034.079 |
| Thornton, 2.5 miles west of, nearly opposite telegraph pole 277/5; copper bolt set in rock (B. & O. bench mark 99) | 1,034.125 |
| Grafton, about 2 miles east of, east abutment of bridge 100, set between tracks in bridge seat; copper bolt (B. & O. bench mark 100) | 1,021.294 |
| Grafton, 1.2 miles east of, at milepost 279; section of rail set vertically in ground between tracks (B. & O. bench mark 101) | 1,007.140 |

### WEST UNION QUADRANGLE.

[Latitude 39° 15′–39° 30′; longitude 80° 45′–81°.]

**From Bridgeport along Baltimore & Ohio R. R. to point 10 miles west of West Union.**

| | |
|---|---|
| West Union, about 2 miles east of, on top of pier at west end of Baltimore & Ohio R. R. bridge 21, over Middle Island Creek; chiseled square marked "B. M." (C. & G. S. bench mark XXXIII) (1903 adjusted value=800.186.) | 799.795 |
| West Union, about 0.2 mile east of, on top of southwest corner of pier of Baltimore & Ohio R. R. bridge 23, over Middle Island Creek; chiseled square, marked "U. S. C. & G. S." (C. & G. S. bench mark N) 1903 adjusted value=804.862.) | 804.480 |
| West Union, about 10 miles west of, on southeast corner stone of pier of Baltimore & Ohio R. R. bridge 26; chiseled square, marked "B. M." (C. & G. S. bench mark XXXIV) (1903 adjusted value=802.817.) | 802.469 |

### HARRISVILLE QUADRANGLE.

[Latitude 39°–39° 15′; longitude 81°–81° 15′.]

**From Cornwall east along Baltimore & Ohio R. R. to point near Cairo.**

| | |
|---|---|
| Cornwall station, about 0.2 mile east of, on coping stone of the east abutment of Baltimore & Ohio R. R. bridge 31, over Bonds Creek; chiseled square, marked "B. M." (C. & G. S. bench mark XXXV) (1903 adjusted value=693.866.) | 693.562 |
| Cairo, 1 mile east of, on east abutment of Baltimore & Ohio R. R. bridge 35, over Bonds Creek; chiseled square, marked "B. M." (C. & G. S. bench mark XXXVI) (1903 adjusted value=685.954.) | 685.655 |

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### ELIZABETH QUADRANGLE.

[Latitude 39°-39° 15′; longitude 81° 15′-81° 30′.]

**Near Petroleum.**

| | Feet. |
|---|---|
| Petroleum, about 655 feet east of, on west abutment of Baltimore & Ohio R. R. bridge over Goose Creek; chiseled square, marked "B. M." (C. & G. S. bench mark XXXVII) (1903 adjusted value=696.933.) | 696.662 |
| Petroleum, about 1 mile west of, on northeast corner stone of abutment of Baltimore & Ohio R. R. bridge 44; chiseled square, marked "B. M." (C. & G. S. bench mark XXXVIII) (1903 adjusted value=693.171.) | 692.905 |

### PARKERSBURG QUADRANGLE.

[Latitude 39° 15′-39° 30′; longitude 81° 30′-81° 45′.]

**Near Parkersburg.**

| | |
|---|---|
| Parkersburg, 2 miles east of, on foundation at northwest corner of Baltimore & Ohio R. R. bridge 52; square cut (C. & G. S. bench mark XXXIX) (1903 adjusted value=607.454.) | 607.256 |
| Parkersburg, on water table, south front, near western corner of courthouse; chiseled square, marked "U. S. C. & G. S. B. M." (1903 adjusted value, C. & G. S. bench mark O=615.800.) | 615.612 |

### BLACKSVILLE QUADRANGLE.

[Latitude 39° 30′-39° 45′; longitude 80°-80° 15′.]

**From Barnesville west along Baltimore & Ohio R. R. to Underwood.**

| | |
|---|---|
| Barnesville, 0.5 mile east of, in south end of small culvert at telegraph pole 304/5; copper bolt (B. & O. bench mark 126) | 873.545 |
| Barnesville, 0.5 mile northwest of, copper bolt set in stone pier east of tracks at Fairmont Coal Co. shaft mine (B. & O. bench mark 127) | 878.391 |
| Barrackville, 1.5 miles east of, at telegraph pole 305/30; rail section set southeast of track (B. & O. bench mark 128) | 887.439 |
| Barrackville, 0.8 mile southeast of, close to north truss of bridge at telegraph pole 306/24, in bridge seat, west abutment; copper bolt (B. & O. bench mark 129) | 893.945 |
| Barrackville, at station, in south end of bridge seat, west abutment of bridge 115; copper bolt (B. & O. bench mark 130) | 901.475 |
| Barrackville, 1 mile southwest of, on bridge seat of abutment of bridge at telegraph pole 308/18; copper bolt (B. & O. bench mark 131) | 909.237 |
| Barrackville, 1.8 miles west of, in abutment of pipe at telegraph pole 309/10; copper bolt (B. & O. bench mark 132) | 913.368 |
| Katy, near, just northeast of tracks, in bridge seat, northwest abutment, at telegraph pole 310/22; copper bolt (B. & O. bench mark 133) | 919.178 |
| Underwood, (Farmington) 1.8 miles east of, in abutment on bridge 116 at telegraph pole 311/5; copper bolt (B. & O. bench mark 134) | 922.462 |
| Underwood (Farmington), 0.8 mile east of, at milepost 312; rail section set on southwest side of tracks (B. & O. bench mark 135) | 931.766 |

### MANNINGTON QUADRANGLE.

[Latitude 39° 30′-39° 45′; longitude 80° 15′-80° 30′.]

**From Underwood northwest along Baltimore & Ohio R. R. to Hundred.**

| | |
|---|---|
| Underwood (Farmington), in abutment of bridge 116¼; copper bolt (B. & O. bench mark 131) | 934.562 |
| Underwood (Farmington), 0.6 mile west of, in abutment of bridge 116½, at telegraph pole 313/15; copper bolt (B. & O. bench mark 137) | 937.232 |

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| | Feet. |
|---|---|
| Underwood (Farmington), 1.5 miles west of, in southeast end of northeast abutment of small bridge at telegraph pole 314/9; copper bolt (B. & O. bench mark 138) | 940.336 |
| Downs (Bloomfield), 1.2 miles southeast of, in bridge seat of abutment of bridge 117, at telegraph pole 315/12; copper bolt (B. & O. bench mark 139) | 948.158 |
| Downs (Bloomfield), 1 mile southeast of, in bridge seat of abutment of bridge 118, telegraph pole 315/23; copper bolt (B. & O. bench mark 139A) | 953.072 |
| Downs (Bloomfield), 1 mile southeast of, 2.8 miles west of Farmington; chiseled square on abutment of bridge, marked "953" (U. S. G. S. bench mark) | 953.095 |
| Downs (Bloomfield), near station; copper bolt set in bridge seat of abutment of bridge 118½ (B. & O. bench mark 140) | 962.196 |
| Downs (Bloomfield), 0.8 mile west of, in bridge seat of abutment of bridge at telegraph pole 317/11; copper bolt (B. & O. bench mark 141) | 962.964 |
| Mannington, 1.8 miles southeast of, in east end of bridge seat, north abutment of highway bridge near milepost 318; copper bolt (B. & O. bench mark 142) | 968.719 |
| Mannington, 0.8 mile southeast of, in bridge seat of abutment of bridge at telegraph pole 319/9; copper bolt (B. & O. bench mark 143) | 969.952 |
| Mannington, northeast corner of front step of Exchange Bank (B. & O. bench mark 144) | 974.486 |
| Mannington, in pillar north of door of Exchange Bank; bronze tablet stamped "975 Grafton 1902" (U. S. G. S. bench mark) | 974.946 |
| Mannington, 1 mile north of, in bridge seat of abutment of bridge 119; copper bolt (B. & O. bench mark 145) | 974.870 |
| Mannington, 1.5 miles northwest of, near telegraph pole 321/23, in bridge seat of abutment of bridge 120; copper bolt (B. & O. bench mark 146) | 981.868 |
| Mannington, 2.2 miles northwest of, in bridge seat of abutment of bridge 121; copper bolt (B. & O. bench mark 147) | 989.512 |
| Mannington, 2.8 miles northwest of, between track and east truss, in bridge seat north abutment bridge 123; copper bolt (B. & O. bench mark 148) | 991.176 |
| Metz, 0.8 mile south of, at telegraph pole 323/30; rail section set east of tracks (B. & O. bench mark 149) | 999.798 |
| Metz, 0.2 mile north of, in abutment of bridge at telegraph pole 324/25; copper bolt (B. & O. bench mark 150) | 1,003.354 |
| Metz, 1.5 miles northwest of, set in abutment of bridge at milepost 326; copper bolt (B. & O. bench mark 151) | 1,017.872 |
| Glover Gap, 0.2 mile southeast of, at milepost 327; rail section set south of tracks (B. & O. bench mark 152) | 1,035.146 |
| Glover Gap, 0.8 mile northwest of, at milepost 328; rail section set south of tracks (B. & O. bench mark 153) | 1,057.741 |
| Glover Gap, 1.2 miles northwest of, in north corner of small culvert at telegraph pole 328/24; copper bolt (B. & O. bench mark 153 A) | 1,084.368 |
| Glover Gap, 2 miles northwest of, in abutment of bridge at telegraph pole 329/10; copper bolt (B. & O. bench mark 154) | 1,118.945 |
| Cottontown, 0.8 mile south of, 0.5 mile north of Burton tunnel, in large arch bridge 126; copper bolt (B. & O. bench mark 155) | 1,126.340 |
| Cottontown, in abutment of bridge near telegraph pole 331/5; copper bolt (B. & O. bench mark 156) | 1,090.687 |
| Burton, between main track and eastbound siding, in bridge seat, northwest abutment of bridge, at telegraph pole 331/27; copper bolt (B. & O. bench mark 157) | 1,065.300 |

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| | Feet. |
|---|---|
| Burton, 0.9 mile northwest of, in west wing of south end stone face for pipe culvert at telegraph pole 332/23; copper bolt (B. & O. bench mark 158).. | 1,039.158 |
| Hundred, 0.8 mile southeast of, in northwest end of southwest coping of box culvert at telegraph pole 333/5; copper bolt (B. & O. bench mark 159)..... | 1,030.142 |
| Hundred, just west of, in northeast end of northwest bridge seat of bridge 128; bronze tablet stamped "1013 Grafton 1902" (U. S. G. S. bench mark, B. & O. bench mark 160)..... | 1,012.895 |
| Hundred, 1.2 miles northwest of, in north end of west bridge seat of bridge at telegraph pole 335/7; copper bolt (B. & O. bench mark 161).. | 995.523 |
| Hundred, 1.8 miles northwest of, at telegraph pole 335/23, in abutment of bridge 130; copper bolt (B. & O. bench mark 161 A)..... | 986.173 |

### LITTLETON QUADRANGLE.

[Latitude 39° 30′–39° 45′; longitude 80° 30′–80° 45′.]

**From Littleton northwest along Baltimore & Ohio R. R. to Bellton.**

| | |
|---|---|
| Littleton, 1.8 miles east of, set in abutment of bridge 131, at telegraph pole 336/21; copper bolt (B. & O. bench mark 162)..... | 969.266 |
| Littleton, 0.8 mile east of, telegraph pole 337/3, in abutment of bridge 133; copper bolt (B. & O. bench mark 163)..... | 950.487 |
| Littleton, 0.5 mile east of, in abutment of bridge 135; copper bolt (B. & O. bench mark 163 A)..... | 944.568 |
| Littleton, between main track and siding at milepost 338; rail section (B. & O. bench mark 164)..... | 941.317 |
| Littleton, 0.8 mile northwest of, south of track at milepost 339; rail section (B. & O. bench mark 165)..... | 1,016.195 |
| Board tree, 0.8 mile south of; center line pin at south end of Board tree tunnel (B. & O. bench mark 166)..... | 1,108.866 |
| Board tree, 0.2 mile south of, in rock projecting from under west end of first course of retaining wall at north end of Board Tree tunnel, east of track; copper bolt (B. & O. bench mark 167)..... | 1,083.905 |
| Board tree, 0.5 mile northwest of, at telegraph pole 341/30; rail section set north of tracks (B. & O. bench mark 168)..... | 1,012.275 |
| Bellton, 1.4 miles southeast of, north of tracks at telegraph pole 343/4; rail section (B. & O. bench mark 169)..... | 933.187 |
| Bellton, 0.5 mile south of, between main track and siding at milepost 344; rail section (B. & O. bench mark 170)..... | 897.538 |

### CAMERON QUADRANGLE.

[Latitude 39° 45′–40°; longitude 80° 30′–80° 45′.]

**From Denver northwest along Baltimore & Ohio R. R. to Moundsville.**

| | |
|---|---|
| Denver station (Bellton), near, in west abutment of bridge 136; in face of back wall, aluminum tablet stamped "888"..... | 888.490 |
| Denver station, 0.8 mile north of Bellton, just south of present track, in bridge seat of east abutment of bridge 137; copper bolt (B. & O. bench mark 171)..... | 910.868 |
| Woodruff, 0.1 mile south of, east of tracks at milepost 346; rail section (B. & O. bench mark 172)..... | 946.852 |
| Woodruff, 0.9 mile north of, east of track at milepost 347; rail section (B. & O. bench mark 173)..... | 1,011.740 |
| Cogley, 0.5 mile south of, between main track and siding at milepost 348; rail section (B. & O. bench mark 174)..... | 1,087.426 |

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| | Feet. |
|---|---|
| Cogley, 0.5 mile north of, east of tracks at milepost 349; rail section (B. & O. bench mark 175) | 1,168.141 |
| Cameron, 2 miles southeast of, east of tracks at north end of Welling tunnel; rail section (B. & O. bench mark 176) | 1,199.223 |
| Cameron, 1 mile east of, set north of tracks at telegraph pole 350/30; rail section (B. & O. bench mark 177) | 1,125.450 |
| Cameron, 0.2 mile east of, in south end of south wing wall, west abutment of bridge 138; copper bolt (B. & O. bench mark 178) | 1,062.823 |
| Cameron, 1 mile west of, between main track and siding at telegraph pole 352/30; rail section (B. & O. bench mark 179) | 1,034.959 |
| Loudenville, set in northeast end of northwest bridge seat of bridge 139; copper bolt (B. & O. bench mark 180) | 995.772 |
| Loudenville, 0.8 mile west of, in north end of west bridge seat of bridge at telegraph pole 354/27; copper bolt (B. & O. bench mark 181) | 986.427 |
| Glen Easton, 1.1 miles east of, in culvert at telegraph pole 355/10; copper bolt (B. & O. bench mark 182) | 977.934 |
| Glen Easton, 0.2 mile east of, in south end of bridge seat of west abutment of bridge 141; copper bolt (B. & O. bench mark 183) | 964.700 |
| Glen Easton, 0.8 mile northwest of, in northeast end of northwest bridge seat of bridge at telegraph pole 357/12; copper bolt (B. & O. bench mark 184) | 926.534 |
| Glen Easton, 1.1 miles northwest of, on abutment of bridge at telegraph pole 357/27; copper bolt (B. & O. bench mark 184 A) | 927.091 |
| Glen Easton, 2.1 miles northwest of, in south end of west bridge seat of bridge 143, at telegraph pole 358/26; copper bolt (B. & O. bench mark 185) | 902.383 |
| Rosbys Rock, 2.5 miles east of, in south capstone of west abutment of bridge 145, telegraph pole 359/30; copper bolt (B. & O. bench mark 186) | 861.845 |
| Rosbys Rock, 2 miles east of, in southeast corner of small culvert just east of Shepherds tunnel; copper bolt (B. & O. bench mark 187) | 847.610 |
| Rosbys Rock, 1 mile east of, in east end of south bridge seat at telegraph pole 361/9; copper bolt (B. & O. bench mark 188) | 804.441 |
| Rosbys Rock, 0.5 mile east of, in north end of east bridge seat of bridge at telegraph pole 361/25; copper bolt (B. & O. bench mark 189) | 789.008 |
| Rosbys Rock, 0.5 mile northwest of, east of track at telegraph pole 362/25; rail section (B. & O. bench mark 190) | 764.414 |
| Rosbys Rock, 1.5 miles northwest of, northeast of track at telegraph pole 363/25; rail section (B. & O. bench mark 191) | 741.744 |
| Rosbys Rock, 2.5 miles northwest of, in north end of west wing of north abutment of bridge at telegraph pole 364/25; copper bolt (B. & O. bench mark 192) | 718.217 |
| Rosbys Rock, 4 miles northwest of, at telegraph pole 365/40, in north end of southeast abutment of bridge 146; square cut (B. & O. bench mark 193; U. S. G. S. bench mark) | 680.494 |
| Moundsville, 1.5 miles southeast of, west of tracks at telegraph pole 367/4; rail section (B. & O. bench mark 194) | 649.520 |
| Moundsville, 1 mile southeast of; a square cut in southwest end of northwest abutment of bridge 148 (B. & O. bench mark 195, U. S. G. S. bench mark) | 646.508 |

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### CLARINGTON QUADRANGLE.

[Latitude 39° 45′–40°; longitude 80° 45′–81°.]

**From Moundsville north along Baltimore & Ohio R. R. to Benwood.**

| | Feet. |
|---|---|
| Moundsville, 0.2 mile northwest of, on north pedestal of water tank 54; square cut (B. & O. bench mark 196) | 645.835 |
| Moundsville, 1.4 miles northwest of, southwest of tracks at milepost 370; rail section (B. & O. bench mark 197) | 668.201 |
| Moundsville, 2.4 miles northwest of, west of tracks at milepost 371; rail section (B. & O. bench mark 198) | 667.584 |
| Moundsville, 3.5 miles north of, in east end of coping of arch over spring at telegraph pole 371/39; copper bolt (B. & O. bench mark 199) | 669.392 |
| Benwood Junction, 2 miles south of, between main track and siding at milepost 373; rail section (B. & O. bench mark 200) | 658.519 |
| Benwood Junction, 1.5 miles south of, in large arch culvert at telegraph pole 373/20; copper bolt (B. & O. bench mark 200 A) | 657.951 |
| Benwood Junction, 1 mile south of, at milepost 374; section of rail set vertically in ground between tracks (B. & O. bench mark 201) | 665.537 |

### WHEELING QUADRANGLE.

[Latitude 40°–40° 15′; longitude 80° 30′–80° 45′.]

**Near Benwood.**

| | |
|---|---|
| Benwood Junction, near, at milepost 375; section of rail set vertically in ground between tracks (B. & O. bench mark 202) | 668.729 |
| Benwood, near, on west end of north coping at east end of east approach to Ohio River bridge; square cut (B. & O. bench mark 114) | 688.194 |
| Benwood, 9.5 feet north of southeast angle of pier of Baltimore & Ohio R. R. bridge over Ohio River, about level with Ohio River railroad track; cut on east face of West Virginia shore pier (United States Corps of Engineers bench mark 94 A) | 648.033 |

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# APPENDIX B.

## SECONDARY ELEVATIONS.

Secondary elevations from records and topographic maps of the United States Geological Survey, including vertical-angle determinations, altitudes of well-known summits, and other useful elevations, are given below. These elevations are approximate only and should not be used for accurate work.

| Place. | Quadrangle. | County. | Elevation. |
|---|---|---|---|
| | | | *Feet.* |
| Allen Knob | Nicholas | Greenbrier | 3,670 |
| Backbone Mountain triangulation station | Parsons | Tucker | 3,661 |
| Bald Knob | Huntersville | Pocahontas | 4,242 |
| Bald Knob triangulation station | Fairmont | Harrison | 1,552 |
| Bayards Knob | Beverly | Randolph | 4,150 |
| Bear Garden Knob | Nicholas | Greenbrier | 3,310 |
| Bear Knob triangulation station | Weston | Upshur | 1,820 |
| Bear Wallow triangulation station | Tazewell | McDowell, W. Va. Tazewell, Va. | 3,170 |
| Beech Knob triangulation station | Nicholas | Greenbrier | 4,144 |
| Bee Knob | Huntersville | Webster | 3,280 |
| Belington triangulation station | Belington | Barbour, Randolph. | 3,075 |
| Beverly Mountain | Beverly | Pendleton | 4,500 |
| Bicketts Knob | Hinton | Monroe | 3,327 |
| Bickle Knob triangulation station | Beverly | Randolph | 4,020 |
| Big Sewell Mountain | Hinton | Fayette | 3,500 |
| Big Spruce Knob | Huntersville | Pocahontas | 4,652 |
| Blue Knob | do | do | 4,368 |
| Boggs Knob | Hinton | Fayette | 3,600 |
| Briar Patch Mountain | Beverly | Randolph | 4,480 |
| Briery Knob triangulation station | Huntersville | Pocahontas | 4,534 |
| Buckhorn Knob | Peterstown | Mercer, W. Va.; Giles, Va. | 4,020 |
| Buck Knob | do | do | 4,356 |
| Cacapon Mountain (Capon (2), triangulation station | Pawpaw | Morgan | 2,196 |
| Chenoweth Knob triangulation station | Elkins | Randolph | 3,836 |
| Chestview | Morgantown | Monongalia | 2,212 |
| Colaw Knob | Beverly | Pocahontas | 4,214 |
| Cottle Knob | Nicholas | Nicholas | 3,015 |
| Cunningham Knob | Beverly | Randolph | 4,485 |
| Dorsey Knob | Morgantown | Monongalia | 1,438 |
| Dougher Knob | Hinton | Greenbrier | 2,818 |
| Eli Taylor Knob | Gassaway | Braxton | 1,565 |
| Elkins Gap | Oceana | Wyoming | 1,944 |
| Erwin triangulation station | Fairmont | Marion | 1,448 |
| Flattop Mountain | Pocahontas Special | Wyoming | 3,400 |
| Fowler Knob | Nicholas | Nicholas | 2,269 |
| Fury Knob | do | do | 2,622 |
| Gibson Knob | Huntersville | Pocahontas | 4,360 |
| Gregg Knob triangulation station | Beverly | Randolph | 4,310 |
| Greenbrier Mountain | Lewisburg | Greenbrier | 3,369 |
| Haines Knob | Beverly | Randolph | 4,130 |
| Harper Knob | Elkins | do | 3,030 |
| Hensley Knob triangulation station | Tazewell | McDowell | 2,500 |
| Hickory Knob | Lewisburg | Alleghany, Va., Greenbrier, W. Va. | 3,361 |
| High Knob | Beverly | Randolph | 4,710 |
| Hopkins Mountain | Lewisburg | Greenbrier | 3,356 |
| Huddleston Knob | Milton | Cabell | 1,020 |
| Huff Knob triangulation station | Raleigh | Mercer, Raleigh | 3,500 |
| Huttons Knob | Beverly | Randolph | 4,260 |



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| Place. | Quadrangle. | County. | Elevation. |
|---|---|---|---|
| | | | *Feet.* |
| Indian triangulation station | Tazewell | McDowell, Wyoming. | 2,500 |
| Ivy Knob triangulation station | Raleigh | Raleigh, Wyoming | 3,593 |
| Joe Knob | Nicholas | Greenbrier | 3,997 |
| Job Knob triangulation station | do | do | 4,838 |
| Keeney Knob triangulation station | Hinton | Summers | 3,945 |
| King Knob (Pullman triangulation station) | Holbrook | Ritchie | 1,367 |
| King Knob triangulation station | Harrisville | do | 1,270 |
| Kite Knob triangulation station | Arnoldsburg | Calhoun | 1,269 |
| Knobly Mountain | Frostburg | Mineral | 1,940 |
| Lambert triangulation station | Pocahontas Special | McDowell | 3,090 |
| Little Beech Knob | Nicholas | Greenbrier | 4,143 |
| Locust Knob | Huntersville | Pocahontas | 4,392 |
| Mann Knob | Midkiff | Lincoln | 1,439 |
| Do | Nicholas | Greenbrier | 3,530 |
| Marlin Mountain | Huntersville | Pocahontas | 3,198 |
| Mike Knob | do | Greenbrier | 4,276 |
| Miller triangulation station | Glenville | Gilmer | 1,429 |
| Owls head triangulation station | West Union | Tyler | 1,400 |
| Page triangulation station | Fayetteville | Fayette | 2,543 |
| Paint triangulation station (Lick Knob) | Raleigh | Fayette, Raleigh | 3,268 |
| Patton Knob | Fairmont | Taylor | 1,666 |
| Payne Knob | Huntersville | Webster | 3,126 |
| Peters Mountain | Lewisburg | Monroe, W. Va., Alleghany, Va. | 3,886 |
| Peterstown | Dublin | Monroe | 1,745 |
| Pilot Knob triangulstion station | Pocahontas Special | Wyoming, Mercer | 3,270 |
| Pine Mountain triangulation station | Nicholas | Nicholas | 2,584 |
| Piney Mountain triangulation station | Milton | Cabell | 1,107 |
| Pinkerton Knob | Hancock | Berkeley | 1,777 |
| Pinnacle triangulation station | Piedmont | Mineral | 3,327 |
| Pointy Knob | do | Tucker | 4,286 |
| Pollock Knob | Nicholas | Greenbrier | 3,925 |
| Porter Knob | Milton | Cabell | 1,143 |
| Potato Hill | Raleigh | Fayette, Raleigh | 3,256 |
| Red Oak Knob | Huntersville | Webster | 3,750 |
| Rich Knob | Milton | Cabell | 1,047 |
| Do | Nicholas | Greenbrier | 3,812 |
| Rich Mountain triangulation station | Elkins | Randolph | 3,660 |
| Riggs Knob triangulation station | Clarington | Marshall | 1,448 |
| Rock Camp Knob | Huntersville | Greenbrier | 4,030 |
| Rudy triangulation station | Fairmont | Marion | 1,802 |
| Sharp Knob (Gauley Mountain) | Huntersville | Pocahontas | 4,545 |
| Shaver triangulation station | Parsons | Tucker | 3,554 |
| Sideling Hill | Pawpaw | Morgan | 2,008 |
| Sinking Creek triangulation station | Holbrook | Gilmer | 1,473 |
| Skin Poplar Gap | Raleigh | Raleigh, Wyoming | 2,330 |
| Sleepy Creek Mountain | Hancock | Morgan | 1,771 |
| Sleepy triangulation station | do | do | 1,533 |
| Spruce Knob (the highest point in West Virginia yet determined). | Beverly | Pendleton | 4,860 |
| Spruce Knob | Huntersville | Pocahontas | 4,730 |
| Sugar Grove Knob | Nicholas | Greenbrier | 3,158 |
| Sugarloaf triangulation station | Vadis | Lewis | 1,714 |
| Terra Alta Lake (water surface) | Kingwood | Preston | 2,558 |
| Town Creek Knob | Raleigh | Fayette, Raleigh | 3,088 |
| Turkey Mountain | Huntersville | Webster | 3,887 |
| Twisted Gun Gap | Oceana | Mingo | 1,442 |
| Walnut Gap | do | Boone, Wyoming | 2,716 |
| Weavers Knob | Lewisburg | Greenbrier | 2,931 |
| Weiss Knob | Piedmont | Tucker | 4,490 |
| White Gap | Hancock | Morgan | 1,523 |
| Whiteoak Mountain | Hinton | Raleigh, Summers | 3,418 |
| Whiterock Mountain | Lewisburg | Greenbrier | 3,212 |
| Wildcat Knob | Nicholas | Nicholas | 2,827 |
| Wolf Creek Mountain | Hinton | Monroe | 2,810 |
| Woods Field | Nicholas | Nicholas | 2,516 |
| Yokums Knob | Beverly | Randolph | 4,330 |

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